

April 11, 1986

## THE CONVENTIONAL ARMS BALANCE

### PART 2

## THE U.S. ARMY MUST COUNTER SOVIET GAINS

### INTRODUCTION<sup>1</sup>

The United States Army suffered a severe crisis in the 1970s. The anti-military mood and defense cuts of the post-Vietnam War era had severely impaired the Army's ability to fight. In 1980, only one of the ten divisions based in the United States was regarded as combat ready. Spare parts were in such short supply that the Army could hope to last only ten or twenty days in a major conflict with the Soviet Union.

Internal Army reforms and the Reagan Administration's force modernization plan have ended the Army's post-Vietnam War slump. But problems remain. For one thing, it is not yet clear what mission the Army's new light infantry divisions will perform. For another, an anticipated personnel shortage at the end of the decade and the continuing underutilization of reserve components threaten to weaken the Army's manpower base. The Army's senior officer corps, moreover, is much too large. And the Army lacks an adequate short-range air defense system and light anti-tank weapon.

These problems must be resolved. The strength of Soviet military power--particularly conventional land forces--grows daily. At the same time, the Pentagon cannot count on annually increased funding. As such, more military capability must be squeezed out of the Army's men, women, and materiel. This may require reforms in the way the Army prepares, organizes, and outfits its forces.

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1. This is the second in a series of Heritage Backgrounders on the conventional arms balance. The first, Backgrounder No. 489 (February 21, 1986), examines "The Threatening Soviet Lead." Future studies will deal with the Navy, Air Force, and NATO.

Specifically, the Pentagon, the Army, and Congress should: 1) prepare for the coming manpower shortage by strengthening the All-Volunteer Force and reforming the Army Reserve system; 2) carefully reconsider the goal of organizing a total of five light infantry divisions; 3) ensure that the Army and the Air Force have sufficient forces and capabilities to implement the AirLand Battle doctrine effectively; 4) accelerate airlift and sealift programs to ensure that the Army can reach distant trouble spots rapidly and sustain combat once it arrives; 5) purchase the Franco-German Milan 2 light anti-armor weapon to replace the ineffective Dragon anti-armor system; and 6) find a replacement, using as much off-the-shelf technology as possible, for the cancelled Sgt. York short-range air defense system.

Making these changes also will require that Congress and the Pentagon change their attitudes about defense budget priorities. In budget battles the Army and ground force missions in general have been pushed consistently to a back seat to the other Services and their missions. If the U.S. is to meet the growing threat of the Soviet land forces, these priorities will have to be changed, at least until Army shortcomings are resolved.

#### THE BALANCE OF LAND POWER

The greatest gap in the U.S.-Soviet balance of power is in land forces. Soviet troop levels far exceed those of the U.S., though the imbalance is less striking when each side's European allies are thrown in. The Soviets outnumber the U.S. in every category of land power--weapons, division equivalents, and manpower--except air support helicopters and amphibious forces. And the improving technological performance of Soviet hardware is reducing the edge in quality previously enjoyed by U.S. military weapons and equipment.<sup>2</sup>

Soviet numerical advantages alone, however, are not what give the Warsaw Pact its decisive edge in Europe. Since NATO is a defensive alliance, it can afford some margin of numerical imbalance. Rather, it is the more difficult to measure indices of military power, such as geographical and operational advantages, that make Soviet-Warsaw Pact numerical superiority so critical. By virtue of its purely defensive doctrine, for example, NATO has ceded to the Warsaw Pact the incalculable advantages enjoyed by the side starting hostilities. The Warsaw Pact also does not have the resupply and logistical problems of the U.S., which must transport large quantities of troops and materiel

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2. For a detailed breakdown of the numerical balance of land power, see Kim R. Holmes, "The Conventional Arms Balance: Part 1, The Threatening Soviet Lead," Heritage Foundation Backgrounder No. 489, February 21, 1986.

over the Atlantic Ocean. Other Warsaw Pact advantages include better weapons standardization and an enforced practical unanimity in peacetime that saves the Warsaw Pact from the many political squabbles that beset NATO.

Another Soviet-Warsaw Pact advantage is in strategy. The ground forces of the Soviet Union and its allies are organized, equipped, and trained to conduct blitzkrieg-like offensive operations, whether against NATO in Europe or against China in the Far East. Soviet tank, motorized rifle, and airborne divisions are highly mobile forces designed to surprise the enemy, capture the initiative in battle, and strike deep behind enemy lines.

## ARMY PROGRAMS

The primary aim of U.S. Army programs is to redress the imbalance of land power with the Soviet Union. Initiatives to achieve this goal fall into four broad categories: 1) the modernization of weapon systems; 2) the improvement of the manpower base; 3) the reorganization of forces to make them more effective; and 4) the reform of the Army's fighting doctrine to compensate for Soviet ground force advantages.

### Modernization

The Army modernization program under the Reagan Administration concentrates heavily on countering the Soviet ground forces threat in Europe. Among these efforts are:

M-1 Abrams Tank. The M-1's superior agility, advanced fire control system, and improved armor will greatly enhance the armor capability of the Army. The M-1 helps offset the 4 to 1 Soviet advantage over the U.S. in tanks.<sup>3</sup> At a production rate of 70 tanks per month, the Army plans to reach its goal of fielding 7,467 M-1s by the early 1990s.<sup>4</sup>

Bradley Fighting Vehicle (BFV). The Bradley will provide mechanized infantry and cavalry forces with better tactical mobility and armored protection. It carries a crew of nine, including the vehicle commander and gunmen in a two-manned turret, and is armed with

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3. The Warsaw Pact, which includes the Soviet Union's East European allies, enjoys more than a 2 to 1 advantage over NATO in tanks.

4. Caspar W. Weinberger, Annual Report to the Congress: Fiscal Year 1986 (Washington, D.C.: Department of Defense, 1985), p. 139.

tube-launched, optically tracked, wire-guided (TOW) missiles and a 25mm automatic cannon that fires armor-piercing rounds.<sup>5</sup> At a production rate of 75 vehicles per month, the Army plans to buy 6,882 Bradleys (both the standard M-2 and M-3 cavalry versions) by the early 1990s.

Many technical experts believe that the Bradley is overly vulnerable to anti-armor fire.<sup>7</sup> But the Army claims that the Bradley is better protected, more flexible, and with its TOW anti-tank guided missiles, more lethal to armored vehicles than the M-113 armored personnel carrier.

Attack Helicopters. The new attack helicopter, the AH-64/Apache, is a quick reacting, airborne tank killer capable of operating in darkness and adverse weather.<sup>8</sup> The Army plans to acquire a total of 1,206 Apache helicopters.<sup>9</sup> So far 28 have been delivered and 675 approved for production.

New UH-60/Blackhawk utility helicopters are being added as well to improve U.S. tactical mobility; these aircraft will be able to deliver 50 percent more cargo and troops over greater distances at higher speeds than the old UH-1/Huey helicopter.<sup>10</sup>

Air Defense. The Patriot all-altitude air defense missile will provide NATO forces with an improved long-range air defense that can deliver several missiles to its targets simultaneously, even under jamming conditions. Fifteen fire units with 317 missiles have been delivered so far, including two battalions already deployed in Europe.<sup>11</sup> The Army plans to deploy 103 fire units with 5,184 missiles.

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5. Tom Donnelly, "House Committee Verdict on Bradley: Not Guilty," Defense News, February 24, 1986, p. 10.

6. Weinberger, Annual Report...Fiscal Year 1986, op. cit., p. 139.

7. Donnelly, op. cit.

8. Association of the United States Army, "Facts from AUSA: AH64(Apache)."

9. Weinberger, Annual Report...Fiscal Year 1986, op. cit., p. 141.

10. Ibid.

11. Ibid.

## Manpower

The Army's manpower base has been greatly improved. The Army reached 100 percent of its recruiting goals in 1985 and expects to do the same this year.<sup>12</sup> The Army Reserves have increased in size, with the active or selected resources growing 25.2 percent since 1980, while the inactive or individual ready reserves are up 18 percent.<sup>13</sup>

The educational level of enlistees, moreover, has improved enormously. And modest improvements have been made in the training of Army personnel. The number of Army battalions rotating through the National Training Center at Fort Irwin grew from 16 per year in 1982 to 24 per year in 1985.<sup>14</sup>

One of the Army's manpower reform ideas is a new manning system. Past practice rotated individuals between home bases in the U.S. and assignments overseas. The new manning system will replace or rotate company and battalion-sized units instead of individuals. The aim is to keep troops together as a unit as long as possible to reduce personnel turnover, and by so doing, strengthen the bonding not only between the officers and men but between the men themselves.

## Force Structure Initiatives

The Army is changing the way it organizes its forces. This program comprises two major initiatives: 1) the reduction of "heavy" armored and mechanized infantry divisions from around 19,000 troops each to 17,000; and 2) the conversion of three traditional unmechanized divisions into smaller, light infantry divisions (LID) with as few as 10,000 troops. Two LIDs are being created from scratch.

The reduction in size of the Army's heavy divisions will require a reorganization of the command structure over specific weapon systems. Some of the heavy divisions' combat support, such as air defense and heavy artillery, will be taken away from the divisions and given to the higher corps command. A "corps pool" of artillery and air defense units will thus be available to any number of divisions if and when they are needed. By relieving the divisions of cumbersome

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12. Caspar Weinberger, Annual Report to Congress, Fiscal Year 1987 (Washington, D.C.: Department of Defense, 1986), Table III.A.1, p. 139.

13. Ibid., p. 144.

14. Weinberger, Annual Report, Fiscal Year 1986, op. cit., p. 34.

combat support units, the Army's new "heavy" divisions will thus be able to move more quickly and decisively than in the past.

The Army's new light divisions are designed primarily for low-intensity combat and for quick deployment to troubled spots in all parts of the world. In contrast to a standard U.S. unmechanized infantry division of 18,486 troops, the new light infantry division will contain only 10,702 men and will have far less equipment than the standard heavy division.

The Army plans to airlift these new divisions anywhere in the world with no more than 500 sorties by C-141B cargo planes; this is about one-third the 1,443 sorties required to move a standard unmechanized division by air.<sup>15</sup> Thus whereas it would take twelve days to send a standard division to the Persian Gulf, it would take only four days for a light division.<sup>16</sup> The Army plans to create five active light infantry divisions. The result will be an Army of eighteen rather than sixteen divisions: ten heavy, five light, and three designed for special missions such as Korea or air assault.

### Land Power Doctrine

The Army has a new doctrine for employing land power: the AirLand Battle plan, a joint Army and Air Force doctrine, which applies to Army operations everywhere in the world at the corps level of command and below. Instead of a static, attrition-type warfare based on linear lines of battle, the AirLand Battle doctrine envisages fighting and moving rapidly along a fluid battle front by making penetrations deep into enemy territory.<sup>17</sup> Its purpose is to overwhelm numerically superior forces by confusing and outmaneuvering them. Imaginative uses of firepower, maneuver, and electronic warfare are intended to deceive, disrupt, and delay enemy units in order eventually to destroy them.

## REMAINING PROBLEMS

### Potential Shortages in Manpower

The Army is anticipating a serious manpower shortage. Because the baby boom generation is aging, the number of eligible recruits

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15. Information provided by U.S. Army.

16. Ibid.

17. John M. Collins, U.S.-Soviet Military Balance 1980-1985 (Washington, D.C., New York, Oxford, London, Toronto, Sydney, Frankfurt: Pergamon-Brassey's, 1985) p. 109.

will diminish rapidly toward the end of the decade. In 1987, for example, the pool of eligible recruits in the 18- to 24-year-old age group is estimated to be 2.5 million lower than current levels.<sup>18</sup> By 1995 it will be 4 million lower. At the same time, the increasingly technical sophistication of the Army's weapons will demand an ever higher quality of recruit. There is a question, then, of whether the Army will be able to maintain its current peacetime strength in the early 1990s.

### Army Reserve Weaknesses

Many improvements have been made in the Army Reserve system. But the continued low availability of proper equipment, manpower, and training has led some analysts to question whether the Army Reserves and National Guard are really ready to fight. A Congressional Budget Office study released last November, for example, warned that, because of problems in reserve unit readiness, there could be a shortfall of 30 percent in units needed for the first 30 days of a European war.<sup>19</sup> This could be decisive in a major confrontation with the Soviets. Reserve components make up half of the Army's combat organization and two-thirds of its units for combat support (e.g., engineers) and combat service support (e.g., supply and maintenance).

The Army National Guard will be short around 44,000 trained soldiers this year.<sup>20</sup> Though lower than in the past, these shortfalls could hamper the ability of the Army to mobilize rapidly for war.

Such inadequacy of the reserve system could combine with the manpower shortfalls at the end of the decade to emasculate the readiness and combat capability of the U.S. Army.

### Bloated Officer Corps

The Army officer corps is too large. There are many bright, dedicated officers in the Army, but the bloated staff structure hinders their ability to reach their full potential as combat officers. For example:

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18. Martin Binkin, America's Volunteer Army: Progress and Prospects (Washington, D.C.: The Brookings Institution, 1984), p. 29.

19. Henry Mohr, "Neglect Hinders Reserve Forces," The Washington Times, December 23, 1985.

20. Manpower Requirements Report FY 1986, Vol. 3: Force Readiness Report (Washington, D.C.: Department of Defense, 1985), p. III-26.

1) In 1984 the Army had 17 divisional command slots for major generals and a handful of operational staff positions at that level.<sup>21</sup> Competing for these were 140 major generals.<sup>22</sup> The vast majority, having failed to get a command, became overly involved in administrative and programming work. The result is a top-heavy, bloated command structure incapable of acting with imagination or speed.

2) In 1984 the Army's Materiel Development and Readiness Command employed 10,850 Army personnel, most of whom were officers.<sup>23</sup> This figure is much too high. Inflated research and development commands often result in the development of weapons that are unreliable and too complex for ground combat forces.<sup>24</sup>

### The Light Infantry Division

Most military analysts agree that the Army needs light infantry divisions. They disagree, however, on how many are required and on how they are to be organized and outfitted.<sup>25</sup> Complaints center on three points:

1) That the light divisions do not have the weapon capabilities to force their way into a combat zone. This could defeat the Army's purpose of fielding them quickly ahead of other units.<sup>26</sup>

2) That the light divisions are incapable of lasting in combat for more than three days.<sup>27</sup> If rushed to a trouble spot, they could be defeated before replacements and supplies arrive.

3) That the Marines are better suited for many (though certainly not all) rapid deployment tasks because they have the air power, naval-based support power, and cargo backups that would enable them to

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21. Edward N. Luttwak, The Pentagon and the Art of War (New York: Institute for Contemporary Studies/Simon and Schuster, 1984), p. 195.

22. Ibid.

23. Ibid., pp. 180-183.

24. Ibid.

25. "Army Trains Light Infantrymen for Speed, Stealth," Detroit News, December 28, 1985, p. 16c.

26. Conversation with Jeffrey Record, February 26, 1986, Washington, D.C.

27. "Army Trains Light Infantrymen," op. cit.



force their way into a combat zone and sustain combat for long periods of time.

### Deficiencies for AirLand Battle

A potential problem is that the AirLand Battle doctrine's requirements for centralized command and perfectly operating advanced technologies might be too great to function reliably in combat. Moreover, so far, the Army and Air Force do not have adequate intelligence processing capabilities or sufficient numbers of ground forces, tactical fighters, precision-guided missiles, and special operation forces to perform successfully the highly mobile operations required by AirLand Battle.<sup>28</sup>

### Weaknesses in Combat Capability

There are a number of areas of combat capability in which the Army is weak, including:

Airlift. The Army is particularly dependent on the Air Force to rush its troops and equipment to distant trouble spots. The U.S. currently does not have enough long-range cargo planes to meet the Army's strategic airlift requirements. The Air Force has no plans to eliminate airlift shortfalls until the late 1990s.<sup>29</sup>

Sealift. The Army is highly dependent on sealift for strategic mobility, in that sealift moves more than 90 percent of Army equipment and supplies. A Pentagon study warns that there will be a 20 to 25 percent sealift deficiency by fiscal year 1988.<sup>30</sup>

Lack of Light Anti-Armor Capability. The U.S. Army lacks an effective portable lightweight anti-tank missile system for the infantry. The lightweight Dragon anti-tank missile system is outdated and ineffective. Improvements have been made in long-range anti-tank missiles, but efforts to find a replacement for the Dragon have been costly and to date unsuccessful.<sup>31</sup>

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28. Collins, op. cit., p. 109.

29. U.S. Air Force Airlift Master Plan (Washington, D.C.: U.S. Air Force, 1983). Also see Kim R. Holmes, "Closing the Military Airlift Gap," Heritage Foundation Background No. 482, January 23, 1986.

30. Armed Forces Journal, July 1984, p. 88. The "Sealift Study" is a classified work conducted by the Office of the Secretary of Defense in March 1984.

31. "Infantry Still Can't Kill Tanks," The Washington Post, January 13, 1986.

Lack of Sufficient Short-Range Air Defense Capability. The cancellation of the ill-fated Sgt. York mobile battlefield anti-aircraft gun was a setback for Army plans to improve its combat air defense capabilities. The Army still desperately needs an adequate short-range air defense system. It also needs a replacement for the 20mm Vulcan anti-aircraft gun whose short range makes it useless against the Soviet Hind attack helicopter.

Secretary of Defense Caspar Weinberger has called for development of advanced anti-aircraft missiles capable of hitting targets out of the gunmen's line of sight, the selection of an existing missile system supplemented by an air defense gun, the fitting of an Army vehicle with Stinger anti-aircraft missiles, and the improvement of short-range air defense command and control.<sup>32</sup>

How fast this plan will be turned into reality, however, remains to be seen, as it is highly complex and still requires research. The danger is that more time will be wasted developing and testing new systems and technologies while the Soviet air threat continues to grow.

#### RECOMMENDATIONS AND PROPOSALS

Prepare for Manpower Crisis. The Administration should consider improving the manpower base of the All-Volunteer Force by: 1) expanding recruiting efforts; 2) extending the standard tour of duty; 3) reducing turnover by granting use of reenlistment bonuses; and 4) attracting a higher quality recruit by providing educational benefits such as the GI Bill. In the meantime, the Pentagon should consider expanding the active components of the Army Reserves. To do this would require changes in the way the Reserves are organized. A number of European models for this may be useful. One is to use reserve battalions slotted for filling or "rounding" out active units as early reinforcement units. Another idea is to assign units that have just completed their tour of active duty to an immediate recall status for a 12-month period.<sup>33</sup> The Pentagon also should try Assistant Secretary of Defense James H. Webb's idea of an annual call-up of inactive reserves to improve unit readiness for combat.

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32. Tom Donnelly, "Weinberger Approves 5-Part Plan for DIVAD System Replacement," Defense News, February 10, 1986, pp. 1, 43.

33. Steven L. Canby and Patrick J. Garvey, "Accelerating Mobilization: More Dividends at Less Cost," unpublished manuscript, March 1984, pp. 8-26.

Reduce Size of Officer Corps. The Pentagon should reduce by 15 percent each the size of the Army's headquarters staff and the staff of the Secretary of the Army. A commitment by the Army to reduce the number of senior officers by 10 percent over a fixed period of time should be made as well.

Rethink the Five Light Infantry Divisions Goal. The Army should reconsider whether it needs five light infantry divisions to accomplish its low-intensity combat mission. The Army already has some light infantry forces in the Rangers and Green Berets. And the 82nd Airborne Division is a rapid deployment force more capable than the proposed light infantry divisions of sustaining combat.<sup>34</sup> Revising the five light infantry division goal should be done only after careful consideration. It very well may be that the diversity of combat missions in Third World low-intensity conflicts will require that all five light infantry divisions be outfitted and specially trained for combat in such regions of the world as the Persian Gulf and Central America.

Rectify Force Deficiencies of AirLand Battle Doctrine. The Administration and Congress should ensure that the Army and the Air Force have sufficient intelligence processing capabilities, fighter aircraft, precision-guided munitions, and ground forces to implement the AirLand Battle doctrine. The Army also should keep abreast of the Soviet's attempts to counter AirLand Battle doctrine by strengthening their first-line assault forces, which could possibly disrupt and eventually defeat the Army's mobile ground operations with a quick thrust into Western Europe.

Accelerate Airlift Program. To reach the Pentagon's goal of eliminating shortfalls in airlift capability as soon as possible, the Air Force should consider purchasing additional C-5B Galaxy and KC-10 Extender cargo planes instead of the new C-17. C-5Bs and KC-10s are already in production and can be acquired sooner and at significantly lower acquisition cost than the C-17, which is still in the engineering phase of development and will not reach full operation until 1991.

Full Funding for Navy Sealift Programs. Congress should provide full funding for the Navy's sealift expansion. This includes deploying more active duty cargo ships, the expansion of the reserve

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34. To create two new light infantry divisions without expanding the Army's size will require the addition of some 21,000 new active duty slots, which most likely will be created by moving active duty combat and service support units into the reserves, to make room for the light infantry division's active duty slots. This is a trade-off imposed by real world manpower constraints, but it must be realized that the cost could be reduced capability to support Army combat units in the field.

cargo ship fleet, and the modification of cargo ships to facilitate the unloading of equipment under hazardous conditions.<sup>35</sup>

Buy the Franco-German Milan 2 Anti-Tank Weapon. To help overcome the Soviet Union's superiority in tanks and armored vehicles, the Army should buy the Franco-German Milan 2 portable anti-tank missile system as soon as possible as a replacement for the poorly performing Dragon. The Milan 2 is vastly superior to the Dragon in terms of range, speed, penetration of armor, accuracy, and reliability.

Replace the Sergeant York Anti-Aircraft System. The Army, the Pentagon, and Congress should find a new mobile anti-aircraft gun as soon as possible without bogging down in research and development. There are many off-the-shelf mobile air defense systems to choose from, including the British Aerospace-Norden Tracked Rapier air defense system, the Franco-German Roland II, the Martin Marietta-Oerlikon air defense system, the Swedish Bofors RBS-70, and the French Shahine anti-aircraft weapon system.

## CONCLUSION

The U.S. Army has improved vastly since the bleak days of the late 1970s. But much remains to be done. The role of the light infantry divisions needs to be clarified. Force deficiencies need to be rectified to implement the Army's AirLand Battle doctrine. The size of the Army's senior officer corps needs to be reduced. New anti-tank and air defense weapons need to be bought. The Pentagon needs to prepare for an impending manpower crunch. And the reserve system needs to be reformed.

All these measures are not only achievable but capable of enhancing the Army's ability to fight.

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35. Weinberger, Annual Report...Fiscal Year 1987, op. cit., pp. 242-244.