

February 21, 1986

THE CONVENTIONAL ARMS BALANCE

PART 1

THE THREATENING SOVIET LEAD

INTRODUCTION¹

At one time, the United States could count with confidence on its technological superiority to offset Moscow's numerical advantage in key categories of conventional weapons. No longer. The unrelenting Soviet military buildup in the past quarter century has eroded seriously the U.S. technological lead. So too has the Soviet Union's huge nuclear arsenal eroded the ability of U.S. nuclear weapons to deter conventional force aggression by the Warsaw Pact in Europe.

Nor can the U.S. and its allies count on unchallenged military superiority in the Third World. The Soviet Union is deploying a blue-water fleet eventually capable of challenging U.S. naval power on the open seas.

Conventional forces are thus more crucial than ever to U.S. security. They help deter attacks against the U.S. and its allies by demonstrating the commitment of U.S. power. They provide credible and flexible military responses to all types of aggression if deterrence fails. And they help to limit the scale of conflicts and terminate hostilities on terms favorable to the U.S. by providing military options short of nuclear war.

A continued commitment to strengthening and modernizing U.S. conventional forces is thus vitally important. Conventional forces are needed not only to counter a growing military threat but to reduce the risk of nuclear war as well. In the event of war with the

1. This overview is the first in a series of Heritage Backgrounders on the conventional arms balance. Future studies will examine the Army, Navy, Air Force, and NATO.

Soviets, U.S. and allied conventional military power could very well make the difference between escalation to nuclear war or defeat.

CONVENTIONAL FORCES AND WESTERN STRATEGY

1) U.S. Strategy and Conventional Forces

The basic mission of U.S. conventional forces is to help assure the physical security of the U.S. and to protect American interests abroad. Conventional forces help deter attacks against the U.S. and its allies. If deterrence fails, they provide a variety of military options to counter threats ranging from a massive invasion of Western Europe or South Korea to counterterrorist operations anywhere in the world.

Conventional forces play a vital role in U.S. global strategy. To meet responsibilities worldwide, the U.S. maintains forces in Western Europe, the Mediterranean Sea, Northeast Asia, the Western Pacific, Southwest Asia, and the Indian Ocean. Forces stationed in the U.S. provide the capability to shift conventional power to contingencies whenever and wherever they arise.²

Stationing forces abroad requires freedom of the seas to ensure the security of sea lines of communication and the ability to transport troops and equipment rapidly to places of need. Thus the U.S. has a great need not only for a strong Navy but for airlift and sealift capability as well.

2) NATO Strategy and Conventional Forces

NATO's strategic objective is to deter war in Europe. NATO's doctrine of flexible response envisions both conventional and nuclear options to contain a Warsaw Pact invasion. NATO reserves the right to use low-yield nuclear weapons first against military targets near the front line, if the circumstances warrant it, but conventional forward defense is clearly the preferred option. If deterrence fails, NATO plans not only to contain a Warsaw Pact attack as far forward as

2. United States Military Posture for FY 1986 (Washington, D.C.: Organization of the Joint Chiefs of Staff, 1985), p. 44.

possible but to strike deep into enemy territory to slow the arrival of enemy "follow-on" reinforcements.³

Because NATO is a defensive alliance, it need not match the Warsaw Pact soldier for soldier, weapon for weapon. If enough forces of the right kind are deployed in Western Europe to demonstrate NATO's resolve, and if the U.S. continues to modernize its intermediate-range and strategic forces, NATO's strategy of deterrence most likely will continue keeping the peace in Europe.

THE BALANCE OF LAND POWER

The greatest gap today 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.⁴

The ground forces of the Soviet Union and its allies, moreover, are organized, equipped, and trained to conduct 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. Soviet land forces have been expanded, modernized, and reorganized, all to improve their offensive capability in the Eurasian theater.

The U.S., on the other hand, is reducing the size of its Army divisions to make them more mobile and transportable. U.S. Army

3. This strategy of deep interdiction is called Follow-On Forces Attack or FOFA. It is a NATO doctrine consistent with but not identical to the U.S. Army's AirLand Battle doctrine, which envisions deep attacks as part of offensive operations at the corps level and below. FOFA, on the other hand, is essentially defensive. While AirLand Battle envisions air, ground, and nuclear attacks to destroy enemy rear formations anywhere in the world, FOFA, as a European-theater doctrine only, is designed to disrupt and delay follow-on Warsaw Pact forces in Europe with aircraft and conventional missile strikes and, as a last resort, nuclear and chemical weapons as well; see John M. Collins, U.S.-Soviet Military Balance 1980-1985 (Washington, New York, Oxford, London, Toronto, Sydney, Frankfurt: Pergamon-Brassey's, 1985), pp. 129-30, Figure 20.

4. Collins, op. cit., p. 108.

"heavy" armored and mechanized infantry divisions are being pared down from around 19,000 to 17,000 troops.⁵ Some heavy divisions are being converted into smaller, so-called Light Infantry Divisions (LID) with as few as 10,000 troops. The Army plans to deploy a total of five light infantry divisions once the plan is completed. The aim is to enable the U.S. to project military power abroad more quickly and to be more mobile and flexible in combat operations.

Overall, the U.S. has better quality troops and more reliable allies than Moscow. While Soviet troops are poorly motivated conscripts in an armed force known for its repressiveness, U.S. troops are highly motivated volunteers who will fight for a free nation. And while the Warsaw Pact is an alliance of coerced nations capable of falling apart in the heat of battle, NATO is an alliance of free nations freely bonded together for mutual defense.

This Western advantage, however, should not be overstated. Because the Soviets envisage a short war in Europe, they plan to deal NATO a decisive blow with high quality, first-line troops before having to call up lower quality reserves. And if a European war is terminated quickly in Moscow's favor, the Soviets will not have to worry about their unreliable East European allies: only a protracted war and the possibility of defeat will force a crack in the Warsaw Pact.

The balance of land power consists of:

1) Troop Levels

Soviet ground forces have a 4 to 1 advantage over the U.S. in total active manpower--around 3 million for the USSR compared to a little over 780,000 for the U.S.⁶ Adding in the forces of European allies, however, reduces Moscow's advantage: The Soviet Union and its Warsaw Pact allies have only a 1.3 to 1 edge over the U.S and its NATO allies in numbers of fully reinforced troops.

5. Information provided by U.S. Army.

6. Collins, op. cit., Table 17.

7. NATO and the Warsaw Pact: Force Comparisons (Brussels: NATO Information Service, 1984), Figure 2. Fully reinforced troops include North American reinforcements and all Warsaw Pact forces located west of the Ural Mountains. NATO data from this source include French and Spanish forces, which though not part of the NATO integrated command, represent a contribution to the defense of Europe.

2) Tanks

Tanks are the workhorses of military landpower. Tank superiority gives a potential aggressor a decided advantage by providing the capability to dominate the battlefield and overwhelm an opponent with rapid mobility and massive firepower.

The Soviet arsenal contains about 54,000 tanks compared to a little more than 13,000 for the U.S.⁸ The Soviets continue to improve the quality of their tank forces. They have strengthened the tank's armor, increased its mobility, and upgraded its fire control equipment.⁹ The newest U.S. tank is the M-1/Abrams, of which a total of 7,467 have been approved for production.¹⁰ The latest Soviet models are the T-64/72/80 series, which make up more than one-third of their total active tank force.¹¹

In Europe, the Warsaw Pact, which includes the Soviet Union and its East European allies, enjoys more than a 2 to 1 advantage over NATO in tanks.¹² Over half of the Soviet Union's tanks, nearly 28,000, face NATO in Europe.¹³ About 15,000 of the Soviets' tanks are on the Sino-Soviet border and in the Far East.

This huge and growing advantage in tanks gives the Soviet Union and its Warsaw Pact allies an increased capability to launch a surprise attack against Western Europe. And the improving technological performance of Soviet tanks has multiplied the significance of an already tremendous numerical lead.

3) Armored Fighting Vehicles

Armored fighting vehicles are crucial in today's highly lethal combat environment. They are necessary to protect troops at the front from artillery and heavy machine gun fire. They also operate in conjunction with tanks to provide mobile infantry support to tank

8. Collins, op. cit., Table 18.

9. Military Posture, op. cit., p. 59.

10. Association of the United States Army, "Facts From AUSA: M1/M1A1 (Abrams) Tank," Arlington, Virginia, 1985.

11. Soviet Military Power 1985 (Washington, D.C.: U.S. Government Printing Office, 1985), p. 66.

12. Military Posture, op. cit., p. 46.

13. Soviet Military Power, op. cit., p. 66.

units. Whoever has an advantage in armored fighting vehicles and armored personnel carriers has a clear advantage in the capability to conduct offensive, swift, and hard-hitting ground operations.

The Soviet Union has a total of 80,000 armored personnel and fighting vehicles compared to around 17,500 for the U.S.¹⁴ Moscow is fielding a new armored personnel carrier, the BTR-70, which has an improved engine and better overall performance, to replace the BTR-60.¹⁵ The U.S. is deploying the new M-2/3/Bradley Fighting Vehicle to replace the M-113, which was first introduced in 1960.¹⁶ The Bradley is better protected, more flexible, and with its TOW anti-tank guided missiles, more lethal to tanks than the M-113.

As with tanks, the largest concentration of Soviet armored fighting vehicles opposes European NATO--nearly 29,000.¹⁷ Over 17,000 patrol the Sino-Soviet border in the Far East. These huge numbers give Moscow an enormous amount of combat flexibility because they enable the Soviet Army to move troops quickly to crew-served weapons systems in so-called combined arms operations. This capability not only adds an extra punch to Soviet arms but greatly quickens their reaction time in combat.

4) Artillery

The Soviet Union has over 43,000 artillery pieces, multiple rocket launchers, and mortars compared to around 7,500 for the U.S.¹⁸ Moscow is replacing several artillery systems with new 122mm self-propelled howitzers, 203mm guns, 240mm mortars, 152 man-towed and self-propelled guns, 152mm self-propelled howitzers, and new 122mm and 220mm multiple-rocket launchers.¹⁹

In the European theater the Soviet Union and its Warsaw Pact allies have more than a 2 to 1 advantage in artillery, mortars, and rocket launchers.²⁰ About half of Soviet artillery pieces and

14. Collins, op. cit., Table 18.

15. Soviet Military Power, op. cit., p. 67.

16. Association of the U.S. Army, "Facts from AUSA: M2/3 Bradley Fighting Vehicle," op. cit.

17. Soviet Military Power, op. cit., p. 67.

18. Collins, op. cit., Table 18.

19. Military Posture, op. cit., p. 60.

20. NATO and the Warsaw Pact, op. cit., Figure 2.

multiple rocket launchers (17,000) face European NATO, while over a quarter (nearly 10,000) are deployed in the Far East.²¹

The clear superiority of Soviet support firepower poses a most serious threat to NATO. Moscow's enormous amount of firepower gives it the capability to punch through NATO lines and disrupt U.S. and allied formations with crushing blows of heavy artillery fire.

5) Anti-tank Guided Missiles

The Soviet Union has 34,000 anti-tank guided missile launchers while the U.S. has only around 16,500.²² Improvements in laminated armor have made all Soviet armored vehicles, including tanks, much less vulnerable to anti-tank weapons than in the past.

The U.S. retains its edge in night vision capabilities and armor-piercing technology, but improving Soviet armor is reducing the effect of the American technological lead in anti-tank guided missiles. Here again, the U.S. strategy of buying better weapons to offset Soviet numerical superiority is being eroded by Soviet modernization programs.

6) Helicopters

The Soviet Union has around 950 helicopter gunships while the U.S. has around 1,300.²³ Moscow, however, is upgrading and expanding its helicopter forces.²⁴ The number of its Mi-24/Hind battlefield attack helicopters has increased and its heavy-lift helicopter capability has been considerably enhanced with the addition of the Mi-26/Halo combat transport helicopter. A new helicopter, the Mi-28/Havoc, similar to the U.S. Army's Apache attack helicopter, will be deployed soon.

The U.S. is fielding a new attack helicopter, the AH-64/Apache; it is a quick reacting, airborne tank killer capable of operating in darkness and adverse weather.²⁵ Moreover, new UH-60/Blackhawk utility helicopters are being added to improve U.S. tactical mobility; these aircraft will be able to deliver 50 percent more cargo and

21. Soviet Military Power, op. cit., p. 68.

22. Collins, op. cit., Table 18.

23. Collins, op. cit., Table 18.

24. Soviet Military Power, op. cit., p. 64.

25. Association of U.S. Army, "Facts From AUSA: AH64 (Apache)," op. cit.

troops over greater distances at higher speeds than the old UH-1/Huey utility helicopter.²⁶

The new Apache attack helicopter is needed to keep the Soviets from gaining even more on the U.S. in numbers of fire support helicopters. At one time the U.S. enjoyed a tremendous lead in helicopter gunships, but no more. Soviet helicopters classified primarily as gunships surpassed U.S. levels in 1982.²⁷ The U.S. can thus no longer count on the margin of safety once provided by unquestioned superiority in this important category of land power.

THE BALANCE OF SEA POWER

The U.S. still enjoys maritime superiority over the Soviet Union, but the growth and improving quality of the Soviet Navy is reducing that margin of superiority considerably. The Soviet Navy is bigger, better, and more versatile than before.²⁸ It has become a genuine general purpose force capable not only of operating in most oceans of the world but of potentially blocking sea lines of communication linking the U.S. with its overseas friends.

The U.S. Navy is embarked on an important shipbuilding program. It is not only in response to Soviet naval modernization programs but meets the requirements of a new global maritime strategy. The key elements of the U.S. 600-ship Navy, scheduled for completion by 1989, are 15 carrier battle groups, four battlefield surface action groups, 100 attack submarines, an expanded support ship program, and improved amphibious lift.²⁹

The balance of sea power consists of:

1) Surface Ships

In general the U.S. Navy has fewer but better quality surface ships than the Soviet Navy. The U.S. has around 390 surface ships compared to around 1,700 for the Soviet Union. This huge discrepancy is caused primarily by the fact that Moscow has many more small ships dedicated to coastal patrol, mine warfare, and logistics and support

26. Caspar W. Weinberger, Annual Report to the Congress: Fiscal Year 1986 (Washington, D.C.: U.S. Government Printing Office, 1985), p. 141.

27. Collins, op. cit., p. 108.

28. Collins, op. cit., p. 112.

29. Military Posture, op. cit., p. 63.

than does the U.S. On the other hand, the U.S. deploys more force projection ships such as aircraft carriers and battleships.

The Soviets are introducing nuclear-powered surface warships that have greater firepower and the capability to stay longer at sea. Although the Soviet Navy still stresses submarines and land-based aircraft carrying anti-ship missiles, its introduction of new types of surface ships has given it not only a broader range of capability but a more balanced naval force as well.³⁰

The Soviets will soon deploy two new aircraft carriers comparable in size and capability to U.S. carriers. These new vessels may some day be capable of launching high performance aircraft, similar to U.S. F-14 fighters, A-6E bombers, and E-2C command and control aircraft.³¹ By contrast, Moscow's three Kiev-class carriers, deployed in 1976, are capable only of operations with helicopters and vertical/shorttake-off and landing aircraft. A fourth Kiev-class carrier, the Kharkov, was being prepared for sea trials in early 1985. The Kirov guided-missile cruiser, the Soviets' first nuclear-powered surface warship, and the Sovremennyy-class guided-missile destroyer have been added to the fleet as well.

These new ships will significantly improve the Soviet Navy's open-ocean operations and provide it with advanced anti-ship, anti-submarine, and anti-air weapon systems. The new aircraft carriers will not only provide the Soviets with a new tool for gunboat diplomacy, but also enable them to engage in conflict and aggression farther from their own shores.

The U.S. Navy plans to add to its fleet this fall a fourteenth nuclear-powered carrier battle group, led by the aircraft carrier USS Theodore Roosevelt. Two restored battleships, the USS New Jersey and the USS Iowa, are now on duty. A new guided-missile cruiser (USS Ticonderoga/CG-47) and a new guided-missile destroyer (USS Arleigh Burke/DDG-51) will improve the Navy's capability to defend the fleet from coordinated air, submarine, and surface ship attacks.

30. Collins, op. cit., p. 112.

31. The Soviets launched the first of their two new carriers from Nikolyaev Shipyard on the Black Sea in early December 1985. The Navy has said that the 65,000-ton carrier is about 1,000 feet long and roughly two-thirds the size of U.S. Nimitz-class carriers. It may be powered by a combined nuclear and steam propulsion system, and it is not expected to be operational until around 1990. It may take as long as ten years, however, to convert Soviet carrier forces from jump jet platforms to carriers capable of handling conventional carrier take-offs and landings. See George C. Wilson, "Pentagon Warns of Soviet Ship," The Washington Post, January 21, 1986.

All in all, the U.S. still retains the upper hand in blue water surface ships, but by a shrinking margin. The buildup of the Soviet Navy has not only extended Moscow's military reach but enhanced its international prestige as well. Soviet surface action groups, led by guided missile aircraft carriers with "jump jets," can make port calls and can even direct military support for pro-Soviet governments and insurgency movements in the Third World.

2) Submarines

Conventional submarines perform three basic missions: 1) they attack surface ships and submarines with torpedoes and anti-ship missiles; 2) they lay anti-ship mines; and 3) they attack targets on shore with long-range land attack cruise missiles.

Soviet cruise missile and attack submarines outnumber U.S. vessels 270 to 99.³² The compensatory superior U.S. quality is declining as the Soviets replace antiquated subs with newer ones that are more difficult to track. The Soviets also are narrowing the longstanding U.S. lead in anti-submarine sensors, weapons capabilities, and submarine "quieting" techniques.³³

Moscow is modernizing and expanding its general purpose submarine force by adding four new classes of nuclear-powered attack submarines (SSNs) and fitting them with advanced anti-ship and cruise missiles. The most capable subs are the new Mike-class attack sub, which has a state-of-the-art propulsion system and hull design, and the new Sierra-class nuclear-powered attack sub, which is 20 percent larger than the Victor-class III attack sub, which was first introduced in 1979.³⁴

The U.S. Navy is modernizing its submarine force as well. Of the 52 Los Angeles-class submarines (SSN-688) approved through FY 1986, 33 have been delivered and are operating with the fleet today.³⁵ These submarines are quieter, faster, and fitted with advanced anti-ship torpedoes and Harpoon and Tomahawk cruise missiles, more lethal than earlier U.S. nuclear attack submarines.

32. Collins, op. cit., p. 112.

33. Understanding Soviet Naval Developments (Washington, D.C.: Department of the Navy, 1985), p. 29.

34. Soviet Military Power, op. cit., pp. 96-97.

35. Caspar W. Weinberger, Annual Report to the Congress Fiscal Year 1987 (Washington, D.C.: U.S. Government Printing Office, 1986), p. 189.

While Moscow has more attack submarines, the U.S. has better ones. Although the Soviets are not able to locate Western submarines in the open ocean, they have increased their ability to block Western ships at strategic choke points and to attack land targets with long-range cruise missiles.³⁶

3) Naval Air

Unlike the U.S. Navy, which relies heavily on aircraft carriers to project naval air power, the Soviet Navy relies on land-based aircraft armed with anti-ship missiles to attack enemy ships at long range. The most threatening of these aircraft is the medium-range Backfire bomber, which threatens the North Atlantic and much of the Pacific from bases in the Kola Peninsula and Western Russia.

The growth of Soviet naval aviation poses a serious threat to U.S. and allied surface ships operating without carrier-based tactical air support.³⁷ Numbering over 1,600 aircraft, Soviet naval aviation has progressively upgraded its land-based mission of keeping Soviet coastal waters free of hostile naval and naval-air forces.

Because of their different missions, therefore, it is not possible to make exact comparisons of U.S. and Soviet naval air forces. On the one hand, with its aircraft carriers, the U.S. has a clear superiority in projecting naval air power over great distances; on the other, Moscow, with its land-based naval air power, can interfere with and possibly deny the access of U.S. surface ships to waters of allies close to the Soviet Union.

4) Amphibious Forces

The U.S. Marine Corps is a more capable fighting force than Moscow's Naval Infantry, the Soviet amphibious assault equivalent of the Marines. The U.S. has around 150,000 amphibious assault troops compared to 16,000 for the Soviet Union.³⁸ The Marines are better prepared for large-scale amphibious operations. They also are more capable of projecting power over large distances because of their ability to "marry up" with equipment stationed on the ground in Europe and on ships in the Indian Ocean.

36. Understanding Soviet Naval Development, *op. cit.*, pp. 15, 44-45.

37. Military Posture, *op. cit.*, p. 55.

38. Collins, *op. cit.*, Table 19.

U.S. amphibious forces, however, suffer from two weaknesses: 1) the Marine Corps does not have enough amphibious assault ships to lift its forces to potential hot spots all over the globe;³⁹ and 2) the proximity of Soviet Naval Infantry to NATO's northern flank threatens Norway with a preemptive Soviet amphibious assault before U.S. Marines or other NATO reinforcement troops arrive.

5) Sealift

The ability to sealift troops and logistical equipment is crucial for projecting forces and sustaining combat over long periods of time. For the U.S., which has extensive overseas commitments, sealift is important for long-term logistical reinforcement of allies in Europe, Northeast Asia, and elsewhere. For the Soviet Union, sealift is important for reinforcing Soviet military districts in the Far East and for supplying distant supplicants in the Third World.

The Soviet merchant marine is immense--1,693 ships--compared to the U.S., which has 706 active merchant marine ships.⁴⁰ Since 1980, the U.S. has discarded 14 cargo ships while the USSR has added 33.⁴¹ The U.S. is improving its sealift capabilities by adding 250,000 deadweight tons of sealift capability by 1990 and by modifying existing ships to make them easier to load and unload.⁴²

The sad shape of the U.S. merchant marine is, however, a serious military weakness. A protracted overseas war could find the U.S. sorely lacking in the sealift capability necessary to resupply U.S. troops fighting overseas. The Soviet Union, on the other hand, will not be short of sealift capability. The reason: Even though Moscow has fewer formal overseas security commitments than the U.S., it has more than twice as many merchant marine ships.

6) NATO vs. Warsaw Pact Navies

NATO navies include the maritime forces of the U.S. and its European allies. They still enjoy an advantage over the total naval forces of the Soviet Union and its Warsaw Pact allies.⁴³ NATO has

39. Collins, op. cit., p. 110.

40. Collins, op. cit., Table 33, p. 115.

41. Ibid.

42. Caspar W. Weinberger, Annual Report to the Congress, Fiscal Year 1987, p. 243.

43. Military Posture, op. cit., Chart IV-3.

an almost 2 to 1 numerical superiority in major surface combatants and a slim numerical advantage in attack submarines.⁴⁴ The Warsaw Pact, however, has about a 2 to 1 numerical advantage over NATO in those amphibious ships that can pose a serious threat to the northern flank in Norway.⁴⁵

These NATO numerical advantages, however, can be misleading. Because the very long sea lifeline between the U.S. and Western Europe must remain open, NATO cannot afford to allow Moscow and its allies to gain regional maritime superiority in the European theater. NATO always must maintain enough naval power in the North Atlantic, the North Sea, the Baltic Sea, and the Mediterranean Sea to deny the Warsaw Pact control of the sea approaches to Europe.

7) The Global Reach of Sea Power

The U.S. still maintains a wide lead over the Soviet Union in the ability to project naval power over large distances. This advantage is necessary because of the extent of U.S. overseas commitments. Since the end of World War II, the U.S. has required a strong navy to protect the sea lines of communications to allies spread all over the globe.

The growth of the Soviet Navy challenges this U.S. strategic requirement. In addition to its huge naval forces constantly on patrol in the Atlantic, Pacific, and Mediterranean, the Soviet Navy enjoys access to ports and basing facilities at Dahalak in the Red Sea, the former British naval base of Aden in South Yemen, and at the Socotra archipelago off the Horn of Africa. The Soviet Union bases its maritime patrol aircraft in South Yemen and Ethiopia, while a naval squadron of surface combatants, attack submarines, amphibious ships, minesweepers, and support ships cruise the Indian Ocean.⁴⁶

This growing reach of the Soviet Navy is a threat to U.S. global strategy. Improvements in every major category of maritime power--from submarines to antisubmarine warfare, from surface ships to naval air power--could eventually undermine the ability of the U.S. Navy to conduct its many combat missions on a global scale.

44. Ibid.

45. Ibid.

46. Ibid., Map IV-6.

THE BALANCE OF AIR POWER

Air Forces have four basic missions: 1) they intercept enemy aircraft which threaten friendly air and ground forces; 2) they attack land targets like tanks and troops to isolate them from enemy reinforcements; 3) they deliver nuclear weapons to enemy ground targets; and 4) they move troops and equipment to and within theaters of operations.

Whoever has superiority in air power has many military advantages. The side with more and higher quality air forces will be better prepared not only to support ground forces with tactical air power, but to project conventional and nuclear forces over great distances as well.

1) Tactical Air Forces

Tactical air forces serve three major military functions: 1) they can control the skies above land and naval forces; 2) they can strike targets behind enemy lines; and 3) they can project military power over great distances. Tactical air superiority grants a solid advantage in controlling the course of land and naval battles.

The U.S. still holds an advantage over the Soviet Union in tactical air power, although by shrinking margins. Moscow has deployed more than 100 of its newest, most sophisticated Soviet fighter aircraft: the Su-27/Flanker, the MiG-29/Fulcrum, and the MiG-31/Foxhound, which are comparable to America's F-15, F-16, and F-14 respectively.⁴⁷ These attack fighters are not only highly maneuverable but also can operate in all weather. Moreover, they can shoot down attacking supersonic aircraft at low altitudes, where, because of ground clutter, keeping track of enemy aircraft is particularly difficult.

The U.S. Air Force has plans to deploy a total of 40 fighter wings by the early 1990s. As of now the force structure consists of 36 and one-half tactical fighter wings (24.5 active and 12 reserve), which include three squadrons of 24 aircraft each.⁴⁸ Other modernization plans include upgrading active and reserve forces, procuring more air-to-air and air-to-ground missiles, and improving the combat readiness and sustainability of tactical air forces.⁴⁹

47. Soviet Military Power, *op. cit.*, pp. 49-50.

48. Weinberger, Annual Report to the Congress Fiscal Year 1987, p. 178.

49. Weinberger, Annual Report to the Congress Fiscal Year 1986, pp. 177, 181.

The U.S. traditionally has relied on technological sophistication to overcome Soviet superiority in numbers of ground attack and interceptor aircraft. But Moscow's deployment of new and improved tactical aircraft, which will have better maneuverability, electronics, armaments, range, and payload capability, has diminished the significance of the American technological lead.

2) Bombers

Long-range bombers can perform conventional as well as nuclear missions. They can strike targets virtually anywhere in the world.⁵⁰ In a maritime role they can attack ships, lay mines, and spot approaching enemy forces.

The Soviet Union recently has moved ahead of the U.S. in the total number of bombers (303 vs. 297).⁵¹ The U.S., however, still outnumbers Moscow in long-range bombers 240 to 170.

The Soviet Backfire bomber, first introduced in 1974, is a medium-range, supersonic bomber which delivers conventional or nuclear bombs to targets in Europe and the Far East. The new Blackjack long-range bomber, which will enter service in 1987, will be outfitted with long-range air-launched cruise missiles and be capable of threatening the U.S. mainland. The Blackjack is similar to but larger than the new B-1 bomber currently being deployed by the U.S.

The U.S. Air Force plans to deploy a total of 100 B1-B bombers to replace the B-52 bombers, which will be retained primarily as a long-range cruise missile carrier. And the U.S. Advanced Technology Bomber, popularly known as the "Stealth" bomber, is planned for deployment by the early 1990s. Eventually it will replace the B-1B, which will allow the transfer of cruise missiles from retiring B-52s to B-1Bs.

The Soviets seem to be reviving their bomber force to take advantage of feeble U.S. air defenses, or perhaps to provide a fallback capability to attack the U.S. in case the U.S. builds a strategic defense system.⁵² Whatever the reason, the full deployment of Backfire and Blackjack bombers will pose a serious threat to U.S. allies and the U.S. itself.

50. Ibid., p. 210.

51. Collins, op. cit., Table 7.

52. Collins, op. cit., p. 55.

3) Air Defense

The Soviet Union has a huge land-based air defense system. Moscow fields about five surface-to-air missile launchers and guns for each U.S. Air Force fighter aircraft. Even when counting the U.S. Marine Corps and Navy air forces, Moscow still has three times as many launchers and guns as the U.S. does planes.⁵³ The Soviet air defense arsenal includes new SA-11 and SA-13 surface-to-air missiles, which increase coverage against low-flying helicopters and high performance aircraft.⁵⁴ The U.S., on the other hand, has virtually no continental air defense system against Soviet long-range bombers. In Europe, the U.S. has begun deploying the Patriot air defense missile system, which is capable of destroying large numbers of incoming enemy aircraft at long ranges. The Army's Sergeant York anti-aircraft gun was canceled in the summer of 1985 because of design deficiencies.

All in all, the tremendous imbalance of air defense capabilities raises serious questions about the ability of the U.S. not only to defend American territory from Soviet strategic bomber attacks but to maintain air superiority against Soviet fighter aircraft in Europe. Air defense is in fact one of the most crucial and immediate weaknesses of the U.S. conventional force posture.

4) Airlift

Airlift is vitally important for dispatching conventional forces overseas and for moving troops and equipment within military theaters of operations.⁵⁵ Airlift requirements depend on the extent and nature of military commitments overseas. As such, the U.S. requires substantial airlift because of its extensive ties and commitments abroad. Moscow, on the other hand, can rely heavily on land transportation for strategic mobility because of its short lines of communication with combat theaters in Europe and Asia. Even so, Soviet long-range (strategic) military airlift has almost doubled since 1980 and now totals 305 aircraft.⁵⁶ The U.S. has a few more, some 329

53. Ibid., p. 111.

54. Ibid., p. 112.

55. Kim Holmes, "Closing the Military Airlift Gap," Heritage Foundation Backgrounder No. 482, January 23, 1986.

56. Collins, op. cit., Table 32, p. 115.

strategic cargo planes, but its need for airlift is much greater than Moscow's.⁵⁷ The balance of short-range tactical airlift is about even: 512 for the U.S. compared to 525 for the USSR.⁵⁸

The Soviets are adding a new strategic airlifter called the Condor, that is comparable to the U.S. C-5A Galaxy cargo plane. This plane will enter service in 1987 or 1988 and will carry "out-sized" equipment such as tanks and large missiles. The U.S. has planned a new generation airlifter, the C-17, which is intended to carry out-sized cargo on strategic and tactical airlift missions.

The growth of Soviet long-range airlift capability will improve Moscow's ability to provide quick logistical support to allies overseas. The increasing ability of the USSR to project forces over great distances demonstrates its commitment to an expanding global strategy.

CONCLUSION

The U.S.-Soviet balance of conventional forces favors Moscow by a wide margin. The increasing technological sophistication of Soviet weaponry has added an extra punch to the already tremendous numerical lead Moscow holds in most categories of conventional arms.

In many cases, the improvement of Soviet weaponry stems from stolen Western technology. It is estimated that since 1980 an average of over 5,000 Soviet military equipment and weapon system research projects per year have benefited from Western hardware and technical documents.⁵⁹ Soviet weapon systems benefiting from Western technology include the new T-80 tank, the new Soviet aircraft carrier, the new SU-27 fighter aircraft, and a variety of defense technologies relating to communication, electronics, and data processing.

The conventional imbalance is most dangerous for the U.S. in ground forces and air defense. This imbalance is particularly acute in Europe, where the U.S. and its NATO allies would be hard pressed to contain a massive Warsaw Pact armored onslaught without resorting to low-yield, battlefield nuclear weapons.

57. Ibid.

58. Ibid.

59. Department of Defense, Soviet Acquisition of Militarily Significant Western Technology: An Update, September 1985, Table 1.

Although the U.S. still maintains superiority over the Soviet Union in naval power, it no longer can count on undisputed control of the world's oceans. The growing Soviet Navy is a threat that could someday undermine the very foundation of U.S. global strategy.

Letting the Soviets make even greater gains in conventional military power is a risk that the U.S. cannot afford to take. To bolster deterrence, the U.S. should:

1) Target for additional funding those areas of conventional military power in which the U.S. is particularly weak or vulnerable. These include air defense, anti-armor weapons, strategic mobility (airlift and sealift), command and control, special operations forces, and anti-submarine warfare.

2) Review the current strategy of fielding expensive and highly sophisticated weaponry to offset Soviet numerical advantages. As the Soviets increase the quality of their weapons, the numerical imbalances will become more acute. The U.S. therefore should consider buying cheaper weapons in greater quantities.

3) Persuade the West Europeans to do more for the ground defense of NATO. It makes little sense for the U.S., with all its global commitments, to carry such a large burden for the land defense of Western Europe. The U.S. spends 7.4 percent of its gross national product for defense; the West Europeans spend on average only 3.3 percent.⁶⁰ The West Europeans therefore can afford to pay more for the defense of their own territory.

Conventional forces are not cheap. In fact, they are far more expensive than nuclear forces. Maintaining adequate conventional forces therefore requires a continued commitment to Ronald Reagan's conventional weapons rearmament program. For there is no other choice if the U.S. wishes to continue its role as the preeminent defender of the free world.

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60. The Military Balance 1985-86 (London: International Institute for Strategic Studies, 1985), Table 4.