

dition to older SS-44 and SS-5 missiles. The United States does not now have a comparable missile. The scheduled deployment of 464 ground launched cruise missiles and 108 Pershing II missiles to western Europe will improve NATO LRINF capabilities. The numerical balance, however, will continue to favor the Soviet Union.

Conventional weapons are those nonnuclear weapons excluding biological and chemical weapons. While the categories of conventional weapons are too numerous to list here, the following systems are considered to be the major categories of conventional weapons. Tanks, artillery tubes, antitank weapons, principal surface combatants, attack submarines, aircraft, surface-to-air missiles (SAM's), and helicopters. Generally speaking the Soviets hold wide production advantages. For example, from 1974 to 1982, the Soviet tank production rate was approximately 3:1 over the United States; artillery and rocket launcher production 14:1; attack submarines 2:1; tactical combat aircraft 2:1; and SAM's 8:1. United States and Soviet production of principal surface combatants over the same period was roughly equal.

In the area of chemical warfare Soviet forces are the world's best equipped, and are capable of both offensive and defensive operations in toxic environments. There are strong indications that the Soviets have a biological warfare capability. Soviet use of toxins in Afghanistan and Southeast Asia has been confirmed. The United States does not have a biological or toxin warfare capability, does not intend to develop one, and has stated that we have no plans to use such a warfare capability.

MEASURES OF MILITARY POWER

The assessment of military power is a complex process, involving quantitative analyses as well as qualitative judgments concerning such intangible and unquantifiable factors as leadership, training, and morale. Static measurements provide useful comparisons of capabilities, but cannot reflect the interaction of forces in war. Whenever possible, static force comparisons should be complemented by dynamic analyses that attempt to incorporate some of the complexities and variables of actual combat. The measures of military power should include resources (military investment, operating costs, and available manpower), forces in being (active and reserve force structure and readiness), weapons and equipment (modernization), logistics (sustainability), technology, and leadership. To each of these measures we must apply both quantitative and qualitative measures to evaluate the strengths and weaknesses of U.S. and allied forces in three major categories—strategic nuclear, nonstrategic nuclear, and conventional.

Since 1971, the U.S.S.R. has outspent the United States in virtually every category of military investment and operating costs. For example, its expenditures for strategic offensive forces were nearly double those of the United States, and the Soviets spent 50 percent more than the United States for general purpose forces. This Soviet commitment to improving the full spectrum of its military capabilities, combined with U.S. and allied failure to keep pace, has helped to negate many qualitative advantages previously held by the West. In terms of manpower, while the total population of all NATO countries exceeds the Warsaw Pact countries, WP forces in being (active and reserves) exceed NATO forces.

For more than two decades the Soviet Union has pursued the steady expansion and modernization of its military forces. In addition, the Soviets have strengthened other Warsaw Pact forces and equipped Soviet clients and surrogates outside Europe as well. The failure of the United States and its allies to keep pace has resulted in a growing imbalance in strategic and general purpose force capabilities. This modernization has applied to weapons, equipment and logistic capabilities.

Although the United States continues to lead the Soviets in most basic technologies, such as the militarily critical area of electronics, this lead is now not nearly so apparent with the modern, highly capable weapons systems fielded by the Soviet Union in recent years. The number and quality of new ground, naval and aerospace weapon systems developed by the Soviets are impressive by any standard.

In the area of leadership, qualitative factors such as battlefield military judgment, timely decisionmaking, training, doctrine and morale are significant for assessment. While balance assessment and comparisons of resources and costs are important to the equation, there is a fundamental recognition that superior resources have not always determined success on the battlefield. The impact of command and control, different organizational concepts and doctrine and decisionmaking on both sides must be included. On the one hand the Warsaw Pact's concern with control and secrecy degrades efficiency, inhibits lower units initiative and leads to internal distrust. On the other hand the authoritarian system allows Pact nations to carry out military programs quickly and effectively. The United States and our allies appear