AUSA BACKGROUND BRIEF

THE FUTURE U.S. ARMY: OUTLOOK FOR THE 1990's

No. 13 May 1990

TOPIC No. 3

ARMS CONTROL AND ARMY MODERNIZATION REQUIREMENTS: ADVANCED TECHNOLOGIES FOR CONVENTIONAL FORCES

SUMMARY OF REMARKS BY

HONORABLE NORMAN R. AUGUSTINE
(Former Undersecretary of the Army)

The remarks of Mr. Augustine were delivered on 5 April 1990 at the third in a series of eight guest speaker presentations to be held for members of Congress and their staffs. The series is cosponsored by the AUSA Institute of Land Warfare and the Institute for Foreign Policy Analysis. The overall theme of the series is "The Future U.S. Army: Outlook for the 1990's." A separate Background Brief will be issued on each of the eight topics to be presented.

As the United States prepares for its future role in a changing European security environment, the impact of new technologies cannot be overestimated, according to Norman R. Augustine, Chairman and Chief Executive Officer of Martin Marietta Corporation. Mr. Augustine concluded that while technology has been a key factor in the power equation in a Europe characterized by confrontation between large blocs of military forces, it may be an even larger factor in the multipolar balance of economic power in Europe in the future. The ability to compete and excel technologically will be the basis of economic and military power.

Mr. Augustine suggested that the pace of technological change often has been grossly underestimated over the long term, while it has been overestimated over the short term. In the military realm, technological "quick-fixes" have often been sought to rectify gaps in field capabilities and have proven unable to meet expectations and demands. The effect of long-term technological innovation on the ability of armed forces to fulfill their mission, however, is commonly overlooked. The United States has enjoyed a lead in the laboratory, but that lead is dwindling.

For the United States Army, Mr. Augustine argued, technological innovation and application is as important as it is to any of the other military services. With the prospect of a U.S. Army reduced in size through arms control agreements and budgetary pressures, technology will become an increasingly vital component of the Army's ability to fulfill its mission. The shoulder-fired anti-aircraft missile, advanced field communications equipment, hand-held anti-tank weapons, directed energy weapons, brilliant weapons, night vision, robotics, simulation, and artificial intelligence are just a few of the wide range of technologies Mr. Augustine highlighted which will improve Army capabilities significantly.

The nature of combat is changing with the ability to see at night; also, with the greatly enhanced capability to locate and keep track of targets almost all of the time. Hitting targets is an area where we have not done too well in the past—it used to take tons of ordnance on target, but now we can hit with a single round. What is important now are countermeasures.

The maintenance of the American defense industrial base is also of critical importance to the United States, and was a major focus of Mr. Augustine's comments. In fact, the health of the defense industrial base is so vital to the ability of the United States to defend itself that it should be considered "part of the order of battle." Unfortunately, with the potential for a 40% decline in procurement when compared with a peak of five years ago, an adequate defense industrial base cannot be kept alive. Mr. Augustine asserted that the United States should devote significant resources to basic research and development which will keep American technologies with military and commercial applications competitive. It now seems that there may be real value in devoting current resources to improving the quality and capability of existing systems, forgo acquisition of a new generation of systems, and invest heavily in the long-term research and development of more capable higher-technology systems.