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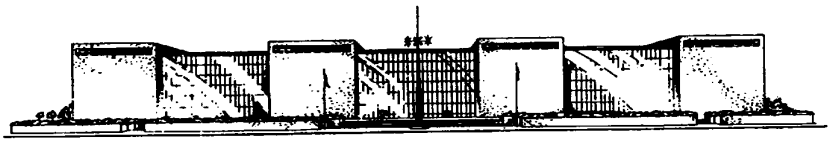

Smart Versus Nuclear Bombs

In the early days of World War II, U.S. air power doctrine aimed at destroying an adversary's ability to wage war by destroying his military production and supply system. This meant strategic bombing targeted specifically at aircraft factories and armament industries crucial to providing the machinery of war, and later concentrated on oil refineries and munitions factories required to keep that machinery in action and on bridges and railroad junctions essential for supplying those resources to fighting men.

In the course of the war, the British rejected this doctrine, and the United States silently allowed it to lapse, as thousand-bomber raids first devastated whole cities in Germany and later leveled most of the major population centers in Japan. In the face of fighters and flak, precision bombing turned out to be almost impossible. At the start of the war, a typical bomb fell up to three miles away from its intended target in daytime and up to five miles away at night. Toward the end of the war, that circle of error had been reduced to about a thousand yards. But that still meant devastating a whole square mile of a city in order to be certain of destroying a single important military target. And it took vast fleets of bombers to fully cover that big an area.

The crews in those armadas of bombers suffered horrendous losses, particularly over Europe, in the early days of the war, when German fighters, day after day, night after night, rose to attack and destroy the unescorted, heavily laden, lumbering aircraft. Only in the last 18 months of the war in Europe were long-range fighter escorts available to keep German attackers at bay.

These difficulties made the atomic bomb developed at Los Alamos, New Mexico, seem like an incomparably more efficient weapon. It could be delivered by a single airplane and was capable of immense destruction. And within a few years after Hiroshima and Nagasaki, military doctrine began to evolve in the direction of huge nuclear arsenals.

A challenge to the nuclear doctrine may now have been offered up by the war in the Gulf. The smart bombs employed there showed a remarkable ability to hit individual buildings and even rapidly moving tanks, while keeping civilian casualties substantially lower than in any previous wars of comparable magnitude.

In effect, the war in the Gulf returned to the original doctrine of concentrating on military targets and showed that the doctrine could now be successfully implemented in combat.

If we genuinely adhere to this revived doctrine and its greater concern for minimizing casualties among civilian populations, how do we deal with the huge nuclear arsenals amassed over four decades of cold war? It makes no sense to target a nuclear weapon for delivery to a single building or even a tank battalion. These weapons of mass destruction vaporize, rather than merely destroy, the intended target, and they wipe out large surrounding regions as well.

If smart weapons can so successfully take care of all purely military requirements, are nuclear weapons to be kept in our arsenals only to pose a nihilistic retaliatory threat to any enemy contemplating first use? And if so, how many such weapons would we need to retain for adequate defense?

Answers to such questions will not be found quickly. Military analysts will need to think through all of the ramifications of the Gulf war before deciding on a new nuclear strategy. But if that strategy were to involve a dramatic reduction of the world's nuclear arsenals, all of us would breathe a little easier for our children and grandchildren.

Wars inevitably claim innocent victims. If the lessons learned from the Gulf war could enable us to lower the nuclear threat that has hung over the world now for nearly half a century, we would at least have gained something from all those "smart" bombs besides just one more set of sophisticated weapons.

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