

addressed symptoms rather than the disease, and usually had little effect. Finally, resources were funnelled to "industries of the future", in a conscious, and military-supported attempt to build a civilian high-tech industry to complement and synergistically interact with the hard-pressed advanced branches of military industry.

Military support for this effort, for Gorbachev's across-the-board arms control and reductions campaign to end the confrontational nature of East-West relations and secure Western trade, aid and investment opportunities, and for withdrawal from foreign involvements--in Afghanistan, Mongolia and Eastern Europe--derived from two doctrinal revolutions.

The first, confirmed by Leonid Brezhnev's Tula Speech and the emergence of Marshal Nikolai Ogarkov as Chief of the General Staff in 1977, relegated nuclear arms to the role of ultimate deterrent, and focused future efforts on the combined operations potentials of new conventional and other more revolutionary technologies (laser, high energy particle beam, etc.) that promised nuclear effect, but with far more precision, and far less collateral damage. Nuclear threat spectres were in effect said to have been check-mated; the focus was switched to other threats that might be relevant in the 21st Century. Ironically, the Gulf War in early 1991, with its "smart" weaponry, which some saw as victory over Soviet arms, was victory only over largely obsolescent Soviet arms, and, in fact, validation of Ogarkov's charter for the future.

The second doctrinal revolution, more intimately associated with Gorbachev's name, was that calling for only "sufficient defence", "defensive defence", and acceptance of "mutual security"; the old **zero-sum** view that insecurity for one meant security for the other was now seen as dangerous delusion--prescription for arms race, and war. The doctrine first emerged indirectly, in an article (co-authored by Andrey Kokoshin, Moscow's foremost civilian strategist) re-evaluating the Battle of Kursk, the largest tank battle of World War 2. It gave artillery barrages the primary credit for victory--though **tankisti** were credited for the pace and extent of later German withdrawals.

The article was seminal. It struck at the core thesis of Soviet nuclear and non-nuclear doctrine since the war: that good defence rests on readiness to preempt offensively. The doctrine now developed owed its intellectual roots to Western conflict theorists shunned by their own governments, notably Anatol Rappoport, to SIPRI (the Stockholm International Peace Research Institute) and the Report of the Palme Commission (chaired by former Swedish Prime Minister Oluf Palme). It was also a logical extension of Ogarkov's doctrine. To his premise of nuclear stalemate and new, high-technology future needs--an expensive recipe, as the latter costs far more than the former--it brought particular attention to the theoretically unlimited range of new defence technologies, and a dimension of time luxury that was absent from Ogarkov.

The changes were crucial. Ogarkov may have identified the technological requirements of future wars, but the continuing immediacy of his threat spectre allowed no question of Moscow's oldest dogma--that maximum in-place force must be deployed along the periphery