## Ballistic missile defence returns

by Paul Buteux

In May 1972, as part of the collection of agreements and understandings that marked the culmination of the first round of Strategic Arms Limitation Talks (SALT), the United States and Soviet Union signed a treaty on the limitation of anti-ballistic missile systems. This ABM Treaty, as subsequently amended in 1974, restricted the two signatories to the deployment of a single, fixed, land-based system each and placed considerable restrictions on the development, testing and deployment of new systems. The Soviet Union chose to maintain and upgrade the defences against ballistic missile attack around Moscow, while the United States built, and then de-activated a single ABM site at Grand Forks, North Dakota, intended to offer some protection to the nearby Minuteman ICBM field.

At the time of its signature, the ABM Treaty was widely regarded in the United States and elsewhere as a substantial contribution to the stabilization of the Soviet-American strategic arms race and as an important step in the direction of further measures of arms control. Now, however, serious discussion is taking place in the United States over the future of the ABM Treaty, including whether or not it should be amended to allow for greater possibilities of anti-ballistic missile defence, or, in the most extreme case, whether the United States should not consider abrogation of the treaty as provided for in Article XV. This development has attracted less public attention than other aspects of the current debate over US strategic policy, but in fact it is intimately connected with the concerns that have stimulated this debate. Should the United States, as a result of these concerns, decide formally to reopen the question of ABM defences, then it is clear that the political and strategic implications would be wide-ranging.

The general background against which the revival of interest in the United States in ballistic missile defence (BMD) has occurred is that of the steady growth in Soviet strategic power and, in part as a consequence, an increasing skepticism and disillusionment with the results of arms control. Moreover, a number of more specific reasons can be adduced for this development. Foremost among these is the growing vulnerability of American land-based strategic missiles to pre-emptive Soviet attack. Although for many this threat is more theoretical than real, and although there is considerable controversy as to its credibility and political utility to the Soviet Union, nonetheless, no American administration can be indifferent to the possibility of ICBM vulnerability — something that has been reinforced with the trend in the US strategic posture since 1974 towards a "limited options" strategy. This strategy places particular emphasis on the need for greater flexibility and endurance, even under conditions of nuclear war, in all aspects of the American strategic arsenal.

## Protecting ICBMs on land

If these American objectives are to be met, a survivable ICBM force is essential. Given present technology, only the land-based ICBMs have the accuracy and flexibility of command and control to make the preferred American strategy at all plausible, and it is this which accounts for the degree of urgency that has been given to overcoming the vulnerabilities of the land-based missile force. A variety of policy options involving the planned mobile MX missile has been examined, but there are many difficulties, not the least of which has been the finding of an effective and politically acceptable deployment mode. Even some of the most elaborate deceptive basing systems suggested, with missiles being moved among a large number of launch points, would be theoretically vulnerable to anticipated Soviet strategic capabilities.

In the search for a technical solution, a number of studies have suggested that the MX basing problem would be much easier to deal with if deployment were associated with a complementary ballistic missile defence, the possibility of which has been enhanced by recent technical developments. Indeed, the impact of technological innovation on the weaknesses and operational inadequacies of previously-planned BMD systems has provided another stimulus to the revived interest in defence against ballistic missile attack. Prior to the signing of the 1972 ABM Treaty, the Safeguard anti-ballistic land-based missile system was in process of deployment in defence of the US land-based missile force. In the view of many of its critics the system would not have worked because of the ease with which an attacker would design his attack so as to circumvent and overwhelm the defence. Now, however, there is considerable confidence in the technical community involved that many of the problems are capable of being overcome (for example, the problems of vulnerability of the radars involved both to direct attack and to the "blackout" effects of detonating nuclear warheads, and of the lack of a computer technology adequate to the enormous demands that would be made on it).

Seemingly futuristic technologies, that nonetheless

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