## Theater Missile Defense: The Cutting Edge of BMD

MD is generally seen as a system to protect troops, their weapons systems and nearby military facilities. As such, TMD weapons are supposed to only be able to hit missiles that have shorter ranges and slower speeds, than intercontinental, ballistic missiles, i.e., strategic missiles. However, the highly-contentious line between theater missiles and strategic missiles (and their defense systems) was hotly debated by the U.S. and USSR for decades.

In 1972, the US-USSR Anti-Ballistic Missile (ABM) Treaty strictly limited these country's defences against ballistic missile attacks. However, the treaty did not clearly distinguish between TMD and strategic missiles, or their "missile defense" systems.

In 1993, the Clinton Administration proposed to Russia that strategic "missile defense" weapons be defined as those that have been demonstrated, through testing, to be able to hit missiles flying more than 5 kms/second. Russia disagreed with this demarcation between the two systems, because TMD weapons would then be defined as those effective against missiles with a range of up to 3,000 kms, thus giving them—in effect—intercontinental, *strategic* "missile defense" capabilities.

Allowing the Clinton Administration's definition would have meant that the U.S. could legally deploy weapons with strategic, ABM capabilities. This would have weakened the ABM Treaty because the U.S. and Russia would then be "reluctant to reduce further the size of their strategic nuclear arsenals." Also, it could have "seriously effect[ed] future nuclear planning by the smaller nuclear powers."<sup>1</sup>

As the Congressional Budget Office explained in 1994, critics of the U.S. proposal said that "an Anti-Ballistic System masquerading as a theater missile defense could be deployed."<sup>2</sup>

In 1997, the "TMD Demarcation Agreement" defined TMD weapons as those with maximum speeds of 3 kms/ second. Such weapons were allowed *if* they had not been tested against BMs travelling 5 kms/second, or those with ranges exceeding 3,500 kms.<sup>3</sup>

Prior to the 1991 Iraq War, the

annual U.S. budget for TMD was \$200 million. By 1994, it had been increased to \$2 billion per year.<sup>4</sup> At that time, the Strategic Defense Initiative Organization (SDIO) was still leading the "missile-defense" charge with an annual budget of under \$4 billion.<sup>5</sup>

In 1993, when MajGen Malcolm O'Neill, the SDIO's acting director, made his pitch to the Senate Armed Services subcommittee for increased SDI funding, he said the SDIO's focus was no longer on space-based systems but that the "acquisition of improved theater missile defense" had become the Pentagon's "first priority."<sup>6</sup>

The importance of TMD within the broader U.S. "missile defense" program, has continued its rapid growth. TMD weapons were improved upon under the aegis of the Ballistic Missile Defense Organization (BMDO). When it became the Missile Defense Agency in January 2002, TMD became a top priority under its wings. Then, in June of that year the Bush Administration

"officially withdrew from the ABM Treaty in order to pursue the development of missile defenses that would have been banned by this agreement."<sup>7</sup>

The U.S. race to develop "missile defense" weapons is largely being conducted by improving upon existing TMD weapons. America's main TMD weapons systems are:

• Patriot PAC-3

• AEGIS/Standard Missile-3

• Theater High Altitude Area Defense.8

The most advanced of these weapons systems are Raytheon's SM-3s which are being developed for use by the U.S. Navy's sea-based, AEGIS Combat System:

"The AEGIS BMDS [Ballistic Missile Defense System] builds upon the SDIO/BMDO investment in Lightweight ExoAtmospheric Projectile technology and the Navy's AEGIS weapon system including Standard Missile and MK41 Vertical Launching System currently deployed on many U.S. Navy and international surface combatants."<sup>9</sup>

This issue of *Press for Conversion!* focuses largely upon various Canadian efforts to assist the Missile Defense Agency in the development of this particular weapons system which is at the forefront—the cutting edge of America's "missile defense" efforts.

## Some Definitions:

**Ballistic Missiles** (BM) are unpowered and unguided after launch. Longer-range BMs may go outside the atmosphere.

**Ballistic Missile Defense** (BMD): All active and passive measures to detect, identify, track and defeat BMs, in strategic and theater tactical roles, or to nullify or reduce their effectiveness.

Layered BMD system: This Bush Administration term refers to several sets of defensive interceptors operating against BMs at different phases (or layers) in their trajectory: boost, midcourse and terminal.

**National Missile Defense** (NMD): This phrase, favoured by Clinton's Administration, referred to a ground-based BMD to protect the country. NMD was to intercept long-range missiles, while TMD was for shorter, "theater"-range missiles. Bush's Administration integrated TMD and NMD into a single, layered BMD system.

**Theater Missile Defense** (TMD): Missile interceptors designed to destroy shorter-range BMs aimed at deployed troops or overseas [military] facilities. Because the ABM Treaty prohibited NMD, but permitted defenses against shorter-range missiles, Clinton's Administration tried to separate TMD and NMD. Bush's Administration eliminated the NMD/TMD distinction and incorporated both into a layered BMD system.<sup>10</sup>

## References

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