

## ERIC MARGOLIS



# Smart weapons

**T**he NATO alliance is about to embark on a major overhaul of its current defence strategy. After years of discussions and studies, the alliance will adopt a new generation of "smart" weapons that, it hopes, will offset the overwhelming superiority in conventional forces of the Warsaw Pact.

Today, NATO is outnumbered, on the average, 2.5 to 1 by the East bloc in tanks, aircraft, artillery and troops. Most secret NATO studies show that the alliance could not hold out against a major Soviet attack for more than four or five days without using nuclear weapons.

No one wants to use the nuclear option. Yet, at the same time, the NATO members refuse to devote sufficient funds to creating more conventional forces. NATO's commander, Gen. Bernard Rogers, has found what he claims is a solution to this seeming dilemma.

Recent advances in technology have produced a new generation of smart weapons. These are medium- to long-ranged missiles that carry submunitions whose high-tech sensors can target and attack enemy tanks, vehicles and guns. An example of how they work:

Side-looking radar carried by aircraft that skirt the forward edge of battle looks deep behind enemy lines. Advancing tanks and supply columns are targeted. Special missiles are fired at these inviting targets. Once overhead, they dispense showers of smart bomblets. These nasty munitions, guided by infra-red and millimetre-wave radars, home in on the enemy.

There are also self-activating mines that wait quietly until vehicles pass, then fire a self-forging slug at the surprised enemy. Other weapons will home in on enemy radars and electronic communications.

## No room on the roads

They are all designed to attack the second wave — or echelon — of advancing Warsaw Pact forces. The logic for this is sound. Russia and its allies have so many troops and vehicles that not all can advance in one line — there is simply not enough room on the roads. Instead, they must come in staggered echelons.

NATO believes it can hold the first-attack wave. What it greatly fears are the follow-up waves that are designated as break-through forces. Of particular threat are newly formed Soviet units called Operational Manoeuvre Groups (OMGs). These powerful, combined arms formations are designed to punch through NATO forward defences, drive deep into the rear and attack NATO airfields, supply bases, nuclear arms and reinforcements.

NATO plans to disrupt or stop the OMGs and second-echelon forces by showering them with smart munitions — rather like a swarm of angry hornets attacking a mass of picnickers. But will these high-tech weapons work and can we afford them?

The basic idea is correct. Each Soviet division has over 300 tanks and 2,000 supply trucks. In any offensive, at least 60 East bloc divisions would surge westward. This means that over 140,000 slow-moving vehicles would jam every road heading west. Anyone used to driving in Friday rush-hour may imagine what this means.

We are looking at a monster traffic jam hundreds of miles deep. Add air strikes, missile attacks and scatter mines and you have a scenario for epic chaos. One broken-down tank can block a road; hundreds of wrecks will cause a logistical nightmare. Just moving one armored division forward a single mile can use up 30,000 gallons of fuel.

Peppering the advancing Russians with bomblets makes good sense. But many military experts have serious doubts over the effectiveness of the smart munitions — especially their guidance systems. It is feared that simple counter-measures like smoke, flares and reflectors may be able to confuse the relatively simple bomblet guidance systems.

## Cost a worry to NATO

As worrying as these technological questions is the matter of cost. NATO members can't even manage to meet their agreement to increase spending by 3%. Yet it has been estimated that the new smart weapons to be deployed in Europe will cost at least \$25 billion. Some estimates go as high as \$80 billion.

If recent history is any guide, high-tech weapons always end up costing about 2.5 times more than the original estimates. Should this hold true, NATO may soon find itself relying on weapons systems that it just cannot afford. No one knows how NATO will come up with \$25 billion over the next few years. Cost overruns will magnify this problem.

To me, NATO appears to have adopted the U.S. penchant for buying any sort of weapon that will replace soldiers on the ground. This avoids casualties but it costs a fortune and does not, as we clearly saw in Vietnam, win wars. The best anti-tank weapon is another tank; the best anti-aircraft system another plane. And nothing can replace the old infantry.

If NATO had unlimited funds, resorting to high-tech expedients would make sense. Given its persistent and growing shortage of defence funds, the recourse to smart weapons may prove a dreadful mistake. The evolving technology of such systems is yet unproven and may just not work. Fielding them will mean denying funds for other important conventional forces.

A few months ago, I heard a speech by a senior Pentagon general extolling the new smart weapons. He waxed lyrical about their effectiveness and ability to "save U.S. lives." After the speech I asked him in private, "would you rather have all the new, smart weapons or five new armored divisions?" After a moment's thought, he smiled and replied, "give me the tanks."

*(Eric Margolis is a member of the Canadian Institute of Strategic Studies)*