

Offence cheaper than defence

Public relations officers of the U.S. armed forces have an inimitable knack for coining telling slogans — and an irresistible bent for exaggeration. There was, for instance, in the last war the U.S. bombsight which supposedly enabled the fortunate bombardier in a Flying Fortress to "hit a pickle barrel from 20,000 ft." More recently, we heard of the Midas reconnaissance satellite which was said to be capable of "spotting a lighted cigarette at a distance of 10 miles". Alas! The Norden and Sperry bombsights of the Americans were no better (or worse) than some less vaunted, similar apparatus in service with other air forces; and the news has recently come out that Midas is being abandoned.

With Midas, the infra-red detection system designed to report the blast-off of enemy missiles, goes Bambi, the armed satellite which was to intercept and destroy missiles in flight. Both have been found too complex for practical application; they had so many parts that could go wrong (upwards of 60,000, reportedly, in Midas) that their operational life was measured in hours. Yet dozens of them would have to fly for years on end in order to provide any kind of protection.

An equally important reason for the cancellation of further work on Midas and Bambi must have been the realization that there is no pressing requirement for them. Except for the undoubtedly existent, but still faint, possibility of devising a kind of "screening" (umbrella) defense against ballistic missiles, there is really no hope of protecting cities and their populations by active air defense. The latter serves only one purpose; to protect the deterrent, thereby making it more credible in the eyes of the enemy.

The U.S. deterrent is gradually being made invulnerable. It will be totally invulnerable in two or three years' time, when it will be mostly based on Minuteman missiles on hardened sites and on Polaris missiles in submarines, all of which will be able to ride out a surprise attack. Consequently, early-warning will be of comparatively little importance; the existing chain of Ballistic Missile Early Warning Stations (BMEWS) will do, even though it may give only about 10 minutes' alarm. Nor will defensive missiles be essential. Most important, the U.S. retaliatory force will certainly be invulnerable before Midas and Bambi could possibly be made operational — even assuming that this could be achieved at all. There was thus really not much sense in continuing to spend

money for them, and a lot of money at that, Midas having cost \$423 million so far.

The waste of resources and effort on such projects as Midas and Bambi is the result of a special form of "capability planning", which consists in trying to counteract any form of attack of which the enemy is thought to be capable. This is very expensive business; in the last 10 years, 61 weapons have been abandoned in the United States at a cost of \$6 billion without tangible results. This is an amount roughly equal to one year's military research-and-development budget, or one total Canadian national budget.

The military — aided and abetted by an ever-avid defense industry — have been blamed for the extent of waste in U.S. defense planning. It is just possible, but by no means as yet certain, that the present tighter civilian control instituted by Defense Secretary McNamara will bring better results. The salient point, however, is not that some of the now-cancelled weapons projects were ill-conceived and then often pursued for too long, but that most of the failures occurred in defensive weapons for nuclear warfare. The fact is that it is easier to make the right decision in respect to offensive than to defensive armaments, because in the former case the technical problems are substantially less.

The case of the bombers compared with anti-bomber defenses provides perhaps the best example of the relative difficulties involved in producing offensive and defensive weapons. Development time for the B-47 and the B-52, from initial design to squadron service, was about four years in each case. When they are phased out of SAC, the B-47 in 1965, the B-52 some time toward the end of this decade, they will each have given some 15 years of yeoman service. As the last B-47 was built in February, 1957, and the last B-52 in October, 1962, effective power will have been derived for something like eight years by merely drawing from existing inventories, without new investment. By comparison, Bomarc was devised in 1949, but got into squadron service only at the end of 1960. It was never effective, even when it was brand-new, because the state of the art of bomber attack had overtaken it before it could be made ready. For the same reason, our own Avro-Arrow was abandoned before it became operational.

It is said "offense is the best defense". It is also the easiest and, all things considered, the least expensive.