

## THE CARE AND FEEDING OF ANTI-ARMOR WEAPONS

### 1. Maintenance of Rocket Launchers

Rocket launchers need some maintenance. Reusable rocket launchers (those with a numerical rating of greater than "0" in the Reload column) require cleaning of the weapon and maintaining the sights. Most of these weapons will require at least 1 hour of maintenance per week. Those with optronic or digital sights require 2 hours of maintenance.

Rocket launchers that are disposable (those with a rating of "0" in the Reload column) do not require maintenance. They are simply readied, used, and then thrown away. If the proper materials are available, they may be repacked by the factory or by a person with the Gunsmith skill (Formidable task).

### 2. Maintenance of ATGM Launchers

ATGM launchers require the same sort of maintenance as rocket launchers, but more so. Sight interfaces must be cleaned and the sights must be maintained. ATGM Launchers normally take 2 hours of maintenance per week, plus one-half hour per additional launcher tube. If the launcher's sights have a night vision channel, add another half-hour.

ATGM that are issued as complete rounds, with a detachable sight unit (such as Dragon and Eryx) require only maintenance of the sight unit itself. Such ATGM require half the normal amount of maintenance.

Disposable ATGM (such as the MBT-LAW) do not require maintenance. They are simply used and discarded.

### 3. Firing Signature

ATGM and rocket launchers generally produce a large plume of smoke upon launching. This unfortunately makes the position of the user very visible in the phase the weapon is launched, and for 5 phases afterward. Spotting the firer is 3 levels easier for 2 phases after launching the weapon, 2 levels easier for the two phases after that, and one level easier for the two phases following those four. It is generally advisable to "shoot and scoot," getting out of the area as soon as possible after the shot. Run away, duck behind some cover, or at least hide.

Weapons with a reduced firing signature (usually due to a start motor that kicks the weapon away from the launcher before starting the sustainer motor) have these sighting penalties reduced by one level. These weapons include those using the Davis Countershot Principle.

### 4. Backblast

Backblast is the large exhaust plume thrown out of the back of the launcher when the weapon is fired. This exhaust consists of hot gases and flame, as well as the light debris kicked up by the exhaust. The backblast can injure persons standing behind the launcher, or possibly even kill them. A graphic example of this can be found in the movie *Red Dawn*; in the final attack on the railway station, Matt and Jeb fire RPG-7's at their targets, and the unlucky KGB general behind them is blinded, burned, and knocked down by the backblast.

Backblast takes the form of a 60-degree cone behind the launcher. This backblast is 10 meters long, plus 5 meters per 20mm of the missile or rocket's caliber. Round fractions down to the nearest whole number. Thus, an M-72A2 LAW (66mm) would produce backblast 26 meters behind the weapon. This backblast causes 1d6 damage, plus 1d6 per 20mm of the weapon, with half of this damage being concussion and half, minus 1d6, being flame damage. (Again, round fractions down.) The other 1d6 damage is fragment damage. Thus, the M-72A2 mentioned above would produce backblast causing 2d6 concussion, 1d6 flame, and 1d6 fragment damage.

Backblast is very dangerous if you are firing from a confined space. If there is not at least one quarter of the backblast distance between you and an intervening wall, the backblast come back to the firer and damages him for one half the normal damage value. Thus, if the M-72A2 firer above were only 4 meters in front of a wall, the backblast would cause him 1d6 concussion damage, 1d6/2 flame damage, and 1d6/2 fragment damage.

Certain weapon use the Davis Countershot Principle. These launchers shoot a mass of sand, water, or frangible plastic out the rear of the launcher when fired. These weapons have reduced and less dangerous backblast. The backblast from these weapons is quartered, with all damage being from fragments or simple blast spray (in the case of sand or water). The main advantage of these weapons is that they may be fired from within tight areas such as small rooms. The firer of such weapons must be only one meter from a wall, and damage is reduced by three-quarters if this stricture is violated.

Backblast contributes to firing signature. The blackblast's effect on firing signature may be reduced by hanging wet blankets or sheets on the walls of a structure, which incidentally reduces the chance of catching the structure on fire with the backblast. This also reduces the effect of firing from within confined quarters, reducing damage from backblast to the firer by three quarters. When the wet materials are hung, firing signature penalty on sighting is reduced by one level.

### 5. Use Against Fortifications

HEAT rounds do have some utility as antibunker weapons. They may use one third their penetration value as DPV for penetrating most fortification materials, such as brick, concrete, wood, stone, and earth. Against metal fortifications, they use their normal penetration value as DPV. HEDP and HESH rounds use their full penetration value as DPV for purposes of penetrating and destroying fortifications, and are quite useful for blowing holes in walls. HE rounds use twice their penetration value for these purposes. WP, CHEM, and ILLUM rounds cannot penetrate structures, nor can any other round that has no penetration value. Kinetic-Energy Penetrators (KEP) such as HVM and Starstreak are not as good at penetrating fortifications, using only one-quarter

their penetration value as DPV. After penetration, the calculation of Concussion and Blast values are based on the remaining DPV. KEP and AP rounds have no explosive power, and therefore use only one-tenth of the remaining DPV for behind-fortification effects; this is primarily from flying fragments of the structure involved.

## 6. Self-Destruct

To prevent stray warheads from flying around the battlefield and possibly hitting friendly troops, rockets and ATGM rounds are typically equipped with a self-destruct mechanism. On an ATGM, this self-destruct range is the same as the maximum range of the missile. On a rocket, this is normally about ten times the short range figure for the weapon. In both cases, the fuze deactivates after this point and cause a low-order detonation of the warhead, which has a damage value of C1 B4.

Most ATGM gunners can also send a signal to the missile they are guiding to cause it to self-destruct. This is normally done when the gunner finds that he accidentally aimed at a friendly target, if the missile goes wildly astray, or (if he is very skilled) to cause an airburst detonation to better kill infantrymen. This is normally done with a switch, but it can be as simple as taking one's finger or thumb off the firing switch at any time (such as with the Dragon). Such a self destruction results in a full-value detonation of the warhead.

## 7. Wind Effect on Shots

Most LAWs, heavier rocket launchers, and ATGMs are affected to some extent by crosswinds, sometimes greatly depending on the weight and speed of the projectile. In general, LAWs and light rocket launchers cause a trained gunner to have a -1 chance to hit for every 10 meters of wind speed as a crosswind at short and medium range, and double that at long and extreme ranges. Medium rockets and large rocket launchers and items such as recoilless rifle rounds are affected the same, but for every 15 meters of cross wind speed. ATGMs are also similarly affected; if the missile is subsonic (1200 meters per phase and below), assess the same penalty as above, but for every 15 meters of crosswind. Supersonic ATGM are not affected by crosswind if they have speed 1200-5000 for every 20 meters of crosswind, and for every 25 meters of crosswind above this speed. Penalties are doubled for untrained gunners; some untrained gunners will never be able to hit a target, and some trained gunners will never be able to compensate for increased wind.