## Projector, Infantry, Anti Tank (PIAT) Mk I

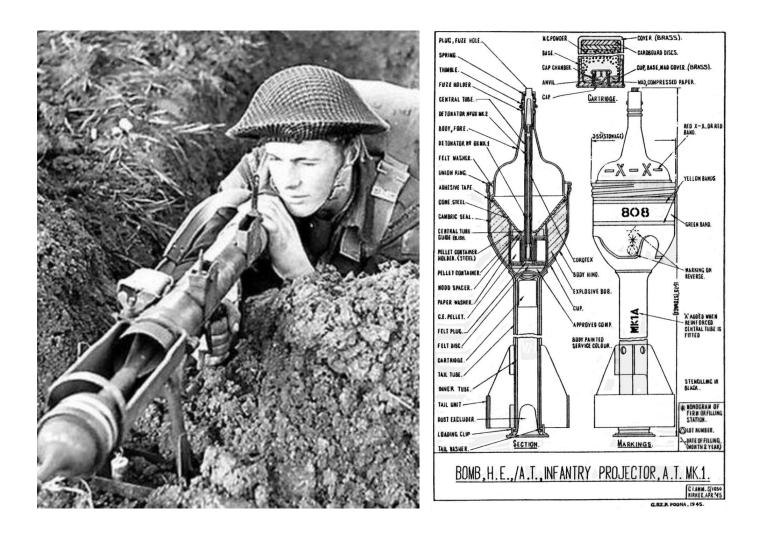
The PIAT was a British man-portable anti-tank weapon developed during the Second World War. The PIAT was designed in 1942 in response to the British Army's need for a more effective infantry anti-tank weapon and entered service in 1943.

The PIAT was based on the spigot mortar system, and projected (launched) a 2.5 pound (1.1 kg) shaped charge bomb using a cartridge in the tail of the projectile. It possessed an effective range of approximately 115 yards (105 m) in a direct fire anti-tank role, and 350 yards (320 m) in an indirect fire role. The PIAT had several advantages over other infantry anti-tank weapons of the period; it had greatly increased penetration power over the previous anti-tank rifles, it had no back-blast which might reveal the position of the user or accidentally injure friendly soldiers around the user, and simple construction. However, the type also had some disadvantages: powerful recoil, a difficulty in cocking the weapon, and early problems with ammunition reliability.

The PIAT was first used during the Allied invasion of Sicily in 1943, and remained in use with British and other Commonwealth forces until the early 1950s. PIATs were supplied to or obtained by other nations and forces, including the Soviet Union (through Lend Lease), the French resistance, the Polish Underground, and the Israeli Haganah (which used PIATs during the 1948 Arab–Israeli War). Six members of the British and other Commonwealth armed forces received Victoria Crosses for their use of the PIAT in combat.

The PIAT was 39 inches (0.99 m) long and weighed 32 pounds (15 kg), with an effective direct fire range of approximately 115 yards (105 m) and a maximum indirect fire range of 350 yards (320 m). It could be carried and operated by one man, [3] but was usually assigned to a two-man team, the second man acting as an ammunition carrier and loader. The body of the PIAT launcher was a tube constructed out of thin sheets of steel, containing the spigot mechanism, trigger mechanism and firing spring. At the front of the launcher was a small trough in which the bomb was placed, and the movable spigot ran along the axis of the launcher and into the trough. Padding for the user's shoulder was fitted to the other end of the launcher, and rudimentary aperture sights were fitted on top for aiming; the bombs launched by the PIAT possessed hollow tubular tails, into which a small propellant cartridge was inserted, and shaped charge warheads.

Conventional spigot mortar designs have a fixed spigot rod, for example the Blacker Bombard. The moving spigot rod in the PIAT design was unusual, and served to help reduce recoil sufficiently to make it a viable shoulder fired weapon.



Ernest Alvia "Smokey" Smith VC, CM, OBC, CD (3 May 1914 – 3 August 2005) was a Canadian recipient of the Victoria Cross, the highest award for gallantry in the face of the enemy that can be awarded to British and Commonwealth forces. He was the last living Canadian recipient of the Victoria Cross.





Born in New Westminster, British Columbia, 3 May 1914 Smith came of age during the Great Depression and, along with many others, struggled to find steady employment.

He was 25 when he joined the Canadian Army on 5 March 1940, becoming part of the Seaforth Highlanders of Canada. In 1943, he first entered into combat. On 10 July 1943, he was part of the 1st Canadian Infantry Division landing in Sicily, remaining active throughout the Sicily and Italian campaign between July 1943 and February 1945.

On the night of 21/22 October 1944 at the River Savio, in northern Italy, Private Smith was in the spearhead of the attack which established a bridgehead over the river. With a PIAT antitank launcher he disabled a Mark V Panther tank at a range of just 30 feet (10 metres), and while protecting a wounded comrade, killed four panzer grenadiers and routed six others. When another tank was sent to take out his position, he used another PIAT to damage it enough to cause it to retreat. He then carried his wounded comrade, and later joined a counterattack to disperse the Germans still attacking his previous position. The squad destroyed three Panther tanks, two self-propelled artillery pieces, a half-track, a scout car, and a few German soldiers. Smith had been promoted to corporal nine times, but demoted back to private each time prior to his actions at the River Savio. He later achieved the rank of sergeant.

Died 3 August 2005 (aged 91)