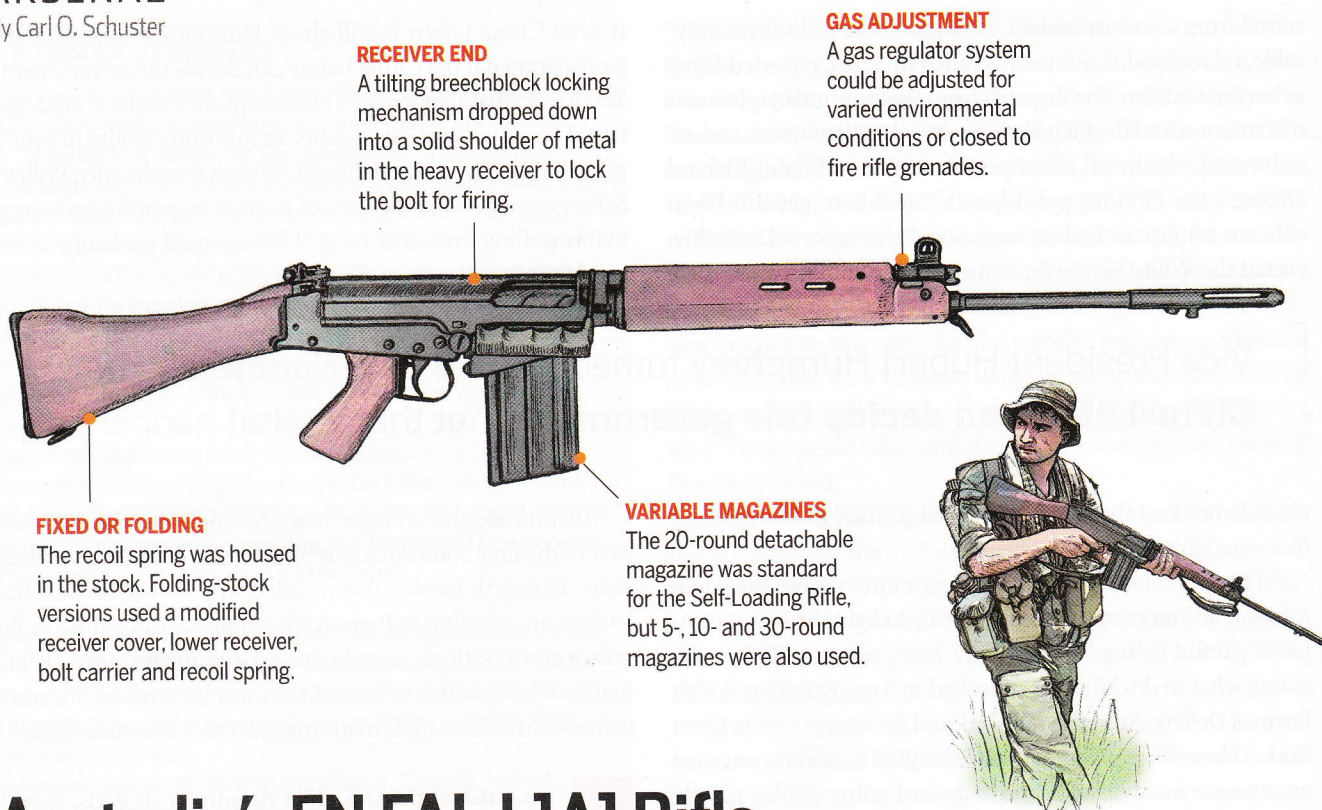


ARSENAL

By Carl O. Schuster



RECEIVER END

A tilting breechblock locking mechanism dropped down into a solid shoulder of metal in the heavy receiver to lock the bolt for firing.

GAS ADJUSTMENT

A gas regulator system could be adjusted for varied environmental conditions or closed to fire rifle grenades.

FIXED OR FOLDING

The recoil spring was housed in the stock. Folding-stock versions used a modified receiver cover, lower receiver, bolt carrier and recoil spring.

VARIABLE MAGAZINES

The 20-round detachable magazine was standard for the Self-Loading Rifle, but 5-, 10- and 30-round magazines were also used.

Australia's FN FAL L1A1 Rifle

The Australian Army's standard infantry rifle traced its roots to 1947, when the Belgian arms manufacturer Fabrique National de Herstal (FN) completed its prototype self-loading rifle, the FN FAL (Fusil Automatique Léger). It was initially chambered for the German "short" 7.92 x 33mm round—the basis for the round used in the AK-47—but neither the U.S. nor Britain was willing to buy a weapon centered on the short round. That led FN to redesign it around what would become the NATO standard 7.62 x 51mm round, which entered production in 1953. Britain eventually acquired a license to produce the L1A1 Self-Loading Rifle (SLR), offering it to the Commonwealth countries. Australia gained a manufacturing license in 1958; production began in 1959.

Australia, in coordination with Canada, then produced a heavier-barreled automatic rifle designated the L2A1 in 1962. Different from the Belgian versions, it had a unique combined bipod/hand guard and a Canadian-built receiver-dust-cover-mounted tangent rear sight. Intended as a squad automatic weapon, the L2A1 was not very accurate in full automatic and lacked a quick-change barrel, limiting its ability to maintain a better continuous rate of fire.

Both versions were gas-operated, using a short-stroke, spring-loaded piston housed above the barrel. The L2A1 used a unique straight 30-round magazine that was essentially an extended L1A1 magazine.

Australia's Special Air Service personnel modified their rifles, cutting the barrel off immediately in front of the gas block and mounting a U.S.-provided XM-148 40mm grenade launcher. They also filed down the selector switches on their SLRs to make them fully automatic. This modified automatic version was unofficially called "the Bitch," because the bolt's twisting motion and the barrel's light weight made it all but impossible to hold the gun on target. Finally, Australia produced a shortened version for jungle warfare designated the L1A1-F1. The F1 used the shortest stock available and a shortened flash suppressor, reducing the rifle's overall length by 2.75 inches.

Australian troops preferred their rifle to the M-16, believing it was more reliable and powerful. The FN's heavier round would pass through elephant grass and shrubbery that would make the M-16's 5.56mm projectile veer off course. The Australian rifle was more robust, although in muddy conditions the gas regulator tended to jam. Operationally, the L1A1 was more accurate than the American M-14 when fired semi-automatically since the rifleman could reduce recoil by bleeding off excess gas.

Australia's Small Arms Factory produced about 220,000 L1A1s and 10,000 L2A1s before production ceased in 1986 and 1982, respectively. New Zealand's troops also used the rifle. It remained in Australian front-line service until 1988. ★

Designation

L1A1 Self-Loading Rifle

Weight

4.3 kg (empty)
(9.48 lbs.)

Round fired

7.62mm x
51mm

Muzzle velocity

840 m/s
(2,756 ft./
sec.)

Effective range

200-600
meters

Rate of fire

20-40
rounds/min.