

## Canadian FN C1A1

The **L1A1 Self-Loading Rifle**, also known as the **SLR** (Self-Loading Rifle), by the Canadian Army designation **C1A1 (C1)** or in the US as the "**inch pattern**" **FAL**, is a British version of the FN FAL battle rifle produced by the Belgian armaments manufacturer FN Herstal. The L1A1 was produced under licence and has seen use in the Australian Army, Canadian Army, Indian Army, Jamaica Defence Force, Malaysian Army, New Zealand Army, Rhodesian Army, Singapore Army and the British Armed Forces.

The original FAL was designed in Belgium, while the components of the "inch-pattern" FALs are manufactured to a slightly modified design using British imperial units. Many sub-assemblies are interchangeable between the two types, while components of those sub-assemblies may not be compatible. Notable incompatibilities include the magazines and the butt-stock, which attach in different ways. Most FALs also use SAE threads for barrels and assemblies. The only exceptions are early prototype FALs, and the breech threads only on Israeli and Indian FALs. All others have standard Imperial or "unified" inch-standard threads throughout.

A variant named L2A1/C2A1 (C2), meant to serve as a light machine gun in a support role, is also capable of fully automatic fire. Differences from the L1A1/C1 include a heavy barrel, squared front sight (versus the "V" on the semi-automatic models), a handguard that doubles as a foldable bipod, and a larger 30-round magazine although it could also use the normal 20-round magazines. Only Canada and Australia used this variant. However, Australia, the UK and New Zealand used Bren light machine guns converted to fire the 7.62x51mm NATO cartridge for use in the support role. Canadian C1s issued to naval and army personnel were also capable of fully automatic fire.

The L1A1 and other inch-pattern derivatives trace their lineage back to the Allied Rifle Commission of the 1950s, whose intention was to introduce a single rifle and cartridge that would serve as standard issue for all NATO countries. They originally adopted the Rifle No. 9 Mk 1 chambered for a 7 mm intermediate cartridge. However to meet this plan and strengthen ties with the United States, the UK soon dropped the No.9 rifle in favor of the Belgian FAL chambered for the proposed American 7.62x51mm cartridge. Based on Canada's experiments with the FAL that led to the C1A1, the UK and Australia adopted the L1A1 (or *Self-Loading Rifle*) as their new service rifle in 1954.

NATO standardized on the 7.62mm NATO cartridge in 1954, but did not adopt a standard rifle. Most adopted a native design chambered for 7.62mm NATO, with

Germany eventually adopting the G3 and the US adopting the M14. Even the C1A1 and L1A1 used inch measurements and were not interchangeable with the FAL's metric parts. France's participation was to adopt a natively-designed service rifle that used their national 7.5mm MAS cartridge.

### **Canada**

Canada adopted the FAL in 1954, the first country in the world to actually ante up and order enough rifles for meaningful troop trials. Up to this point, FN had been making these rifles in small test lots of ones and twos, each embodying changes and improvements over its predecessor. The Canadian order for 2,000 rifles "cast the FAL in concrete" for the first time, and at FN, from 1954 to 1958 the standard model of the FAL rifle was called the FAL 'Canada'...These excellent Canadian-built rifles were the standard arms of the Canadian military from first production in 1955 until 1984.



The C1A1 with the unique revolving plate aperture rear sight visible



Canadian soldier with a C2 light machine gun. The C2 is a Canadian version of the L2A1

The Canadian Armed Forces, the Ontario Provincial Police and Royal Canadian Mounted Police operated several versions, the most common being the C1A1, similar to the British L1A1 (which became more or less a Commonwealth standard), the main difference being that rotating disc rear sight graduated from 200 to 600 yards and a two-piece firing pin. Users could fold the trigger guard into the pistol grip, which allowed them to wear mitts when firing the weapon. The Canadian rifle also has a shorter receiver cover than other Commonwealth variants to allow for refilling the magazine by charging it with stripper clips. It was manufactured under license by the Canadian Arsenals Limited company. Canada was the first country to use the FAL. It served as Canada's standard battle rifle from the early 1950s to 1984, when it began to be phased out in favor of the lighter Diemaco C7, a licence-built version of the M16, with a number of features borrowed from the A1, A2 and A3 variations of the AR platform assault rifle.

The Canadians also operated a fully automatic variant, the C2A1, as a section support weapon, which was very similar to the Australian L2A1. It was similar to the FN FAL 50.41/42, but with wooden attachments to the bipod legs that work as a handguard when the legs are folded. The C2A1 used a tangent rear sight attached to the receiver cover with ranges from 200 to 1000 metres. The C1 was equipped with a 20-round magazine and the C2 with a 30-round magazine, although the two were interchangeable. Variants of the initial C1 and the product improved C1A1 were also made for the Royal Canadian Navy, which were capable of automatic fire, under the designations C1D and C1A1D. These weapons are identifiable by an A for "automatic", carved or stamped into the butt stock. Boarding parties for domestic and international searches use the C1D. The C2A1 was produced to replace the Bren Gun for the

Canadian Armed Forces, however the C2A1 was unpopular among Canadian soldiers due to poor handling and sustained fire capability. With roughly 2700 examples produced, the C2A1 would be replaced in the late-1980s by the FN Minimi in the Canadian Armed Forces, ending its military service.



The C2A1

## Rifle, 7.62 mm, C1A1 (SLR)

**Type** Semi-automatic rifle (L1A1/C1)  
Light machine gun (L2A1/C2)  
Battle rifle

**Place of origin** United Kingdom

### Service history

**In service** 1955–1987 Canada

### Production history

**Designer** Dieudonné Saive, Ernest Vervier

**Designed** 1947–53

**Manufacturer** Canadian Arsenals, Ltd.

**Produced** 80,000 to 90,000  
**72,470** C1/C1A1 were contracted to be purchased by DND.

**Variants** C1/C1A1 (Rifles)  
C2/C2A1 (Squad automatic weapons)

### Specifications

**Mass** 4.337 kg (9.56 lbs) empty<sup>[2]</sup>

**Length** 1,143 mm (45 in)

**Barrel length** 554.4 mm (21.7 in)

**Cartridge** 7.62x51mm NATO

**Action** Gas-operated, tilting breechblock

**Rate of fire** Semi-automatic (C1A1)  
Fully Automatic (C2A1) 675-750RPM

**Muzzle velocity** 823 m/s (2,700 ft/s)

**Effective firing range** 800 m (875 yards)

**Feed system** 20- or 30-round detachable box magazine

**Sights** Aperture rear sight, post front sight



## THE FN C1A1 SNIPER RIFLE WITH SNIPER SCOPE C1

SNIPER SCOPE C1" was made by Leitz and was their model ELC1088. The German company "Leica" built a new plant in Midland, Ontario. The reticule is a vertical tapered post in the lower half, with a dashed line across in the middle. The scope is provided with clicks of 1/2 mil. The range adjustment is by rotating the eye piece ring. The drum is graduated 1,000 yards scope in 100-yard increments. An additional adjustment of 3 mils (6 clicks) is provided at each end of the zeroing scale to allow for zeroing. (p. 122 North American FALs by R. Blake Stevens) Scope is about 4x28 and with 5 degrees left/right adjustment.

In 1959 Canada ordered **305** "C1 SNIPER SCOPE" sets on the same contract (CD544900) as the 72,470 rifles.



Canadian FN bayonet

## Ashton Museum photograph

