



## France's Nuclear Inventory

France began its nuclear weapons program in the early 1950s in an effort to restore political and military parity with their perceived peers and potential adversaries. In the wake of the United Kingdom and Russia acquiring nuclear capabilities, France moved quickly and produced its first plutonium bomb on [July 1, 1963](#).

The size, structure and doctrine of the French nuclear arsenal has fluctuated through the decades. Today, France maintains an ambiguous nuclear use policy, as well as a "[final warning](#)" nuclear strike policy. This policy option, developed in the 1970s, states that France may use nuclear weapons first in order to defend its vital interests.

While France is a member of the North Atlantic Treaty Organization (NATO), its nuclear forces are not part of the Alliance's integrated military command structure. However, France [may call upon](#) its nuclear arsenal if there are threats to its neighbors or allies.

### How Many?

France is estimated to possess [290](#) nuclear weapons, of which about 280 are deployed. The remaining weapons are thought to be in maintenance or storage. The vast majority, or approximately [240](#), are deployed by the French Navy, which maintains a continuous at-sea presence via its nuclear-powered submarines. This posture ensures a secure second-strike capability in the event of a nuclear attack.

France engaged in a slow, but steady build-up of its nuclear arsenal and by 1980, it neared the threshold of what the Soviets considered posing the threat of "[unacceptable damage](#)" to the Soviet Union. The stockpile would grow from there, doubling in size, [reportedly](#) as a response to missile defense systems around Moscow. France had amassed around [540](#) nuclear weapons by the end of the Cold War.

Since then, France has cut its nuclear arsenal in half, ceased explosive nuclear testing and eliminated its land-based missiles, deeming those systems as no longer necessary for its deterrent. France now maintains its nuclear arsenal at a level of strict sufficiency, meaning it does not have the capability to target all of an adversary's deployed nuclear forces.

### Air

France maintains [40](#) land-based aircraft and [10](#) carrier-based aircraft to deliver its air-launched cruise missiles, called the ASMP. The Rafale fighter-bomber has a range of 2,000 kilometers and is produced for the French Air Force and for carrier-based operations in the French Navy. There are 40 thermonuclear warheads available for French Strategic Air Forces and 10 warheads are available for the French Naval Nuclear Aviation Force.

### Sea

France has maintained a continuous at-sea presence [since 1996](#) through its nuclear-powered ballistic missile submarines (SSBN). Four of the Triomphant-class SSBNs are kept on rotation to maintain this presence. Frequently, only one is at-sea at a time for an estimated period of 70 days. The French Navy has two submarine-launched ballistic missile (SLBM) types, the [M51.1 & the M51.2](#). The M51 has a multiple independently-targetable reentry vehicle (MIRV) and both variants have a range of [9,000+](#) kilometers. Each submarine can carry sixteen M51 SLBMs and each SLBM is believed to carry [five to six warheads](#). The Triomphant-class SSBNs will be replaced in the next two decades with the [SNLE-3G](#).

### Land

France used to deploy nuclear medium-range ballistic missiles (MRMB) in silos at Plateau d'Albion, but these missiles were [deactivated in 1996](#). Initially, their mission was to respond to a surprise attack by striking Soviet territory as a "[final warning](#)," but with the collapse of the Soviet Union, this capability was deemed unnecessary.