

Sentinel nuclear deterrent

The \$96 billion Sentinel overhaul will modernize the land-based leg of the U.S. nuclear triad and replace five-decade-old Minuteman III intercontinental ballistic missiles (ICBMs)

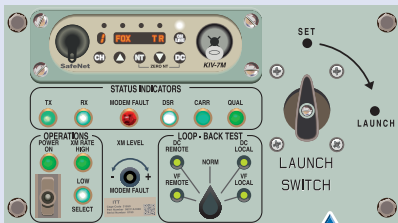
■ **LGM-35A Sentinel:** ICBM developed by team led by Northrop Grumman, in co-operation with U.S. Air Force

▶ **Payload: MK21A Reentry Vehicle (RV)** developed by Lockheed Martin Corp. at cost of \$996 million

Warhead: W87-1 nuclear, based on Minuteman III 300 kiloton-yield W87-0. W87-1 is capable of being upgraded to 475kT

● **Modularity:** Key feature allows easy modernization and replacement of components in future

● **Three-stage solid-fuel engines:** Of 18 critical technologies, static test fire of first-stage rocket motor is successfully completed in March 2023



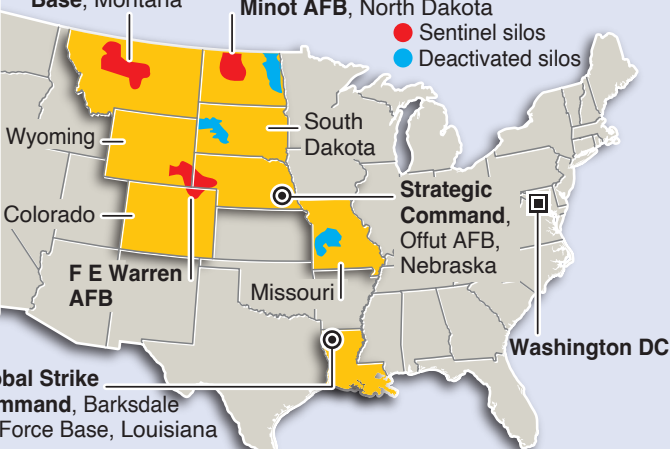
Sentinel: Will replace 400 Minuteman ICBMs, their ageing control centres and three missile bases covering area of 82,600 sq km

Malmstrom Air Force Base, Montana

Minot AFB, North Dakota

● Sentinel silos

● Deactivated silos



Global Strike Command, Barksdale Air Force Base, Louisiana