

# USAF completes upgrade of LGM-30G Minuteman III ICBM

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The US Air Force (USAF) has completed the upgrade of the LGM-30G Minuteman III intercontinental ballistic missile (ICBM) as part of its effort to further modernise the nuclear enterprise.

The \$68m upgrade programme involved replacing the legacy cartridge tape unit (CTU) and launch facility load cartridge (LFLC) systems with a new data transfer unit (DTU).

USAF 91st Operations Support Squadron ICBM codes operations chief captain Kevin Drumm said: "The legacy LFLC's take about 45 minutes to produce the Wing Codes Processing System, and about 30 minutes to load at a launch facility.

"The new DTU takes less than 30 minutes to produce, and about seven minutes to load."

The DTU has been designed to load the Missile Guidance Set, which is the brain of the Minuteman III, with sensitive cryptographic data and other information the missile needs in order to function.

A single DTU has enough capacity to store the same amount of data as 12 LFLCs.

The LFLC can only hold enough data and information for a single launch facility, which meant airmen would need to carry up to 50 LFLCs to achieve a complete code change.

Airmen who previously carried two CTUs can now take one DTU to enable faster, reliable and more secure ICBM operations.

The new device was first used on 23 June, the USAF stated.

Drumm added: "After its first operational use, we transitioned to using DTUs 100% of the time during the 742nd Missile Squadron's Operation Olympic Step."

During Olympic Step, maintenance teams using DTUs observed a significant increase in productivity.

**Image:** *An unarmed Minuteman III ICBM launches during an operational test at Vandenberg Air Force Base, California, US. Photo: courtesy of the USAF photo by senior airman Ian Dudley.*