

China tested hypersonic weapons twice

China conducted two tests of hypersonic weapons in summer 2021, raising concerns in the United States that Beijing is gaining ground in the race to develop a new generation of arms

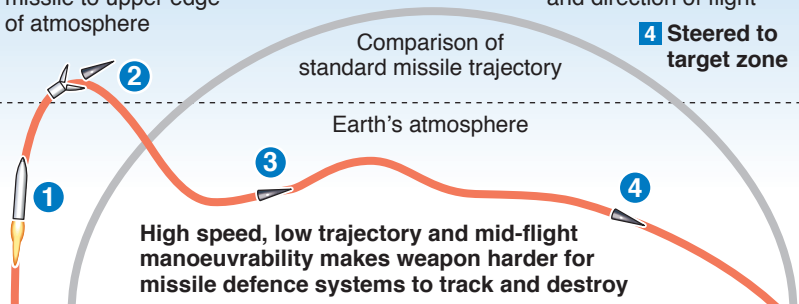
HYPERSONIC WEAPON FLIGHT (typical profile shown)

1 Launch: Weapon carried by ballistic missile to upper edge of atmosphere

2 Release: Glide vehicle separates from missile

3 Manoeuvres: Alter speed, altitude and direction of flight

4 Steered to target zone



High speed, low trajectory and mid-flight manoeuvrability makes weapon harder for missile defence systems to track and destroy

Chinese tests: Conducted Jul 27 and Aug 13. Nuclear-capable hypersonic glide vehicle (HGV) circled globe before speeding towards its target

DF-17: Hypersonic missile first unveiled by China in Oct 2019

Warhead: Conventional or nuclear

First stage: Ballistic missile boosts HGV to release altitude

Range: 1,800-2,500km
Length: 11m

Second stage

HGV separates from missile and glides to target, reportedly reaching speeds of Mach 5-10 (1.72-3.43km/second)

Accuracy

"Within metres" of target

Missile tested in 2021 is different to DF-17, with longer range