

North Korea's ICBM threat

North Korea has successfully produced a miniaturised nuclear warhead to be delivered by its Hwasong-14 (KN-14) intercontinental ballistic missile (ICBM), according to an analysis by the U.S. Defence Intelligence Agency

Hwasong-14: Two-stage, liquid-fuelled ICBM

Nose cap:

Contains guidance system

Second stage: Powered by RD-4D10 engine – originally designed and built for Soviet R-27 submarine-launched ballistic missile (SLBM)

First stage fuel tank: UDMH (unsymmetrical dimethyl hydrazine). Fuel and oxidiser spontaneously ignite on contact

First stage oxidiser tank

First stage: Soviet-era RD-250 engine

Warhead: "Physics package" delivered by reentry vehicle (RV)

Oxidiser: Nitrogen tetroxide

Fuel tank

Reentry vehicle: Based on 1950s U.S. Mark 2 RV

RV ablative heat shield

1 Physics package: Nuclear weapon could potentially produce 15 kilotons – equivalent to Hiroshima bomb

2 Telemetry and instrumentation

3 Antenna: Wrapped around RV

4 Trajectory control jets