

GRAPHIC 3

HYPersonic GLIDE VEHICLE TRAJECTORY VS. A BALLISTIC TRAJECTORY

Hypersonic weapons are those that travel in excess of 3,800 miles per hour—five times the speed of sound. Depicted at right is the potential flight profile of one category of hypersonic weapon, a hypersonic glide vehicle (HGV).

Although initially lifted into the atmosphere by a boost vehicle, once released the HGV glides to its target at high speed and is capable of maneuvering throughout its flight. This contrasts to the relatively predictable, parabolic arc of a traditional ballistic missile.

The combination of high maneuverability, precision, and speed will make HGVs a lethal addition to the battlefield. Hypersonic cruise missiles are being developed by various militaries.

