

The background features several flowing, wavy bands of color. At the top, a thick band of red and orange flows from left to right. At the bottom, there are more complex, overlapping waves in shades of red, orange, and yellow, creating a sense of movement and depth. The central area is a plain white background.

CRUISE MISSILE




DEFINITION

- A cruise missile is basically a small, pilotless airplane

HISTORY

- The idea of an “aerial torpedo” was shown in the British 1909 film The Airship Destroyer.
- In 1916 Lawrence Sperry patented and built an “aerial torpedo” ,a small biplane carrying a TNT charge , a Sperry autopilot and a barometric altitude control.
- In The period between World Wars the United Kingdom developed the Larynx(Long Rang Gun with Lynx engine) which underwent a few flight test in the 1920s.
- In the Soviet Union,Sergey Karolev headed the GIRD-06 cruise missile project from 1932 to 1939 which used a rocket-powered boost-glide design.
- Germany first deployed cruise style missiles ,during World war 2 .
- Immediately after the war the United State Air Force had 21 different guided missile projects including would-be cruise missiles.

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- During the Cold War period both the United States and the Soviet Union experimented further with the concept, deploying early cruise missile from land , submarines and aircraft
 - Between 1957 and 1961 the United States followed an ambitious and well-funded program to develop a nuclear-powered cruise missile, Project Pluto.

DIMENSIONS

- Cruise missiles are 20 feet (6.25 meters) long and 21 inches (0.52 meters) in diameter. At launch, they include a 550-pound (250-kg) solid rocket booster and weigh 3,200 pounds (1450 kg).

GUIDANCE SYSTEMS

- Four different systems help guide a cruise missile to its target:
- **IGS** - Inertial Guidance System
- **Tercom** - Terrain Contour Matching
- **GPS** - Global Positioning System
- **DSMAC** - Digital Scene Matching Area Correlation

INFOGRAPHY

BOEING AGM-86 CALCM

Conventional Air-Launched Cruise Missile



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A Turbofan engine

B Fuel

C Air intake

D Bomb

E DSMAC

F Tercom

CATEGORIES

- Cruise missiles can be categorized by size, speed (subsonic or supersonic), and range, and whether launched from land, air, surface ship, or submarine. Often versions of the same missile are produced for different launch platforms; sometimes air- and submarine-launched versions are a little lighter and smaller than land- and ship-launched versions

HYPERSONIC

- A hypersonic cruise missile would travel at least 5 times the speed of sound.



SUPERSONIC

- These missiles travel faster than the speed of sound, usually using ramjet engines. The range is typically 100–500 km, but can be greater. Guidance systems vary.



LONG-RANGE SUBSONIC

- The US, Russia, UK, Israel, Pakistan, Turkey, Iran, China and India have developed several long-range subsonic cruise missiles. These missiles have a range of over 1,000 kilometres (620 mi) and fly at about 800 kilometres per hour (500 mph). They typically have a launch weight of about 1,500 kilograms and can carry either a conventional or a nuclear warhead.



MEDIUM-RANGE SUBSONIC

- These missiles are about the same size and weight and fly at similar speeds to the above category, but the range is (officially) less than 1,000 km. Guidance systems vary.



SHORT-RANGE SUBSONIC

- These are subsonic missiles which weigh around 500 kilograms (1,102 lb) and have a range of up to 300 km (190 mi)





The End

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