

2025 TECHNOLOGY ABSTRACT

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Technology Abstract Title: Earthquake Weapon

Description: Ultrasonic or acoustic weapon to destroy runways, buildings, bridges. Weapon will generate a very strong acoustic wave that causes structures to resonate, and thereby destroy them. This has the advantage of being a destructive force that is not designed to kill people.

Advantages: Destructive to structures and warmaking potential, but does not directly threaten people.

Challenges: How to generate a strong enough acoustic field.

Countermeasures: Acoustic wave cancellation methods (generate a wave out of phase with the weapon) standard earthquake protection methods, such as flexible structures, truss designs, reinforced materials.

Possible Applications: Destruction of structures Attacking hardened, hidden structures. Airfield interdiction (destroy runways) Civilian application: demolition.

References: None.

Keywords:

ACOUSTIC BEAMS
ACOUSTIC FIELDS
ACOUSTIC RESONANCE
ADVANCED WEAPONS
DIRECTED ENERGY WEAPONS
UNCONVENTIONAL WEAPONS
WEAPONS EFFECTS
EARTHQUAKE ENGINEERING
EARTHQUAKES

Technology Areas:

Directed Energy and Kinetic Energy Systems Technology (PRIMARY)
Munitions Devices and Energetic Materials Technology
Survivability and Hardening Technology
