

# China could be developing ship-based railgun

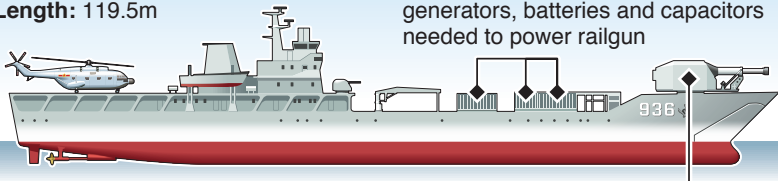
Photos circulating online appear to show the first experimental deployment of a new “supergun” aboard a Chinese warship, fuelling speculation that the weapon could be an electromagnetic railgun

## TYPE 072 III-CLASS LANDING SHIP “HAIYANGSHAN”

**Displacement:** 7,000 tonnes

**Length:** 119.5m

**Shipping containers:** May house generators, batteries and capacitors needed to power railgun



## HOW IT COMPARES

**Effective range (km)**

**160** U.S. railgun prototype

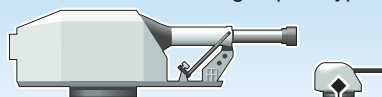
**24** Conventional naval gun\*

**Muzzle velocity (Mach)**

**7.0**

**2.2** \*U.S. 127mm Mk 45

**Turret:** Bears strong resemblance to dimensions of U.S. railgun prototype



**Barrel length** ← 10m →  
**Size of gun normally carried on bow**

## HOW RAILGUNS WORK

Positive rail

Armature

Negative rail

Projectile

Electric current

**1** Projectile placed between two conductive rails. Armature placed behind projectile, bridging gap between rails

**2** Electrical pulse passes through rails, creating opposing magnetic fields

Third magnetic field created in armature, which is repulsed by fields in rails and forced out of barrel with projectile

Magnetic field along axis of rail