Mr. Gorham
U.S. History II
Modern American History
Second World War

Name:
Block:

Weapons of the Second World War

**The following weapons did not exist or were not major factors in the First World War. In WWII, these weapons will decide battles involving nations, continents, and oceans.*

Airborne Weapons

Fighters: small, fast planes armed w/ machine guns. One pilot. Used to "dogfight" & to escort bombers.

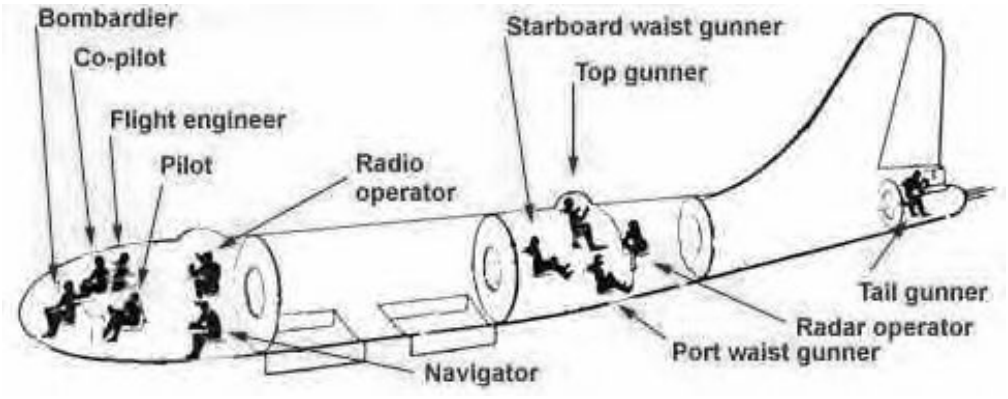
- *P-51 Mustang (USA)*
- *Mitsubishi A6M "Zero" (Japan-300 of these carrier-based fighters attacked Pearl Harbor)*

Dive-Bombers: heavier planes armed with one large bomb. Nosedived into target, dropped bomb. Pilots sometimes blacked out from excessive g-forces. Also, **torpedo bombers**, flew to sea level then launched torpedo bomb.

- *Junkers Ju 87 "Stuka" (Germany-terrorized Europe w/ deadly accuracy & evil siren. "Flying artillery")*
- *Douglass SBD "Dauntless" (USA—won the Battle of Midway)*

Bombers: long-range, high-altitude. Flown by **crew of 11** and armed with payload of bombs. Can attack far-off targets but accuracy an issue. Tail gunners, nose-gunners, and ball-turret gunners didn't last long.

- *B-17; B-24; B-29[1] (USA-Boeing, built in Seattle)*



Airborne Troops. Infantry divisions[2] carried by air to drop zones, often behind enemy lines to disrupt communication and confuse enemy.
101st Airborne Division (USA—dropped in occupied France prior to D-Day)

[1] A B-29, the *Enola Gay*, captained by Paul Tibbets dropped the world's first atomic bomb over Hiroshima, Japan on August 5, 1945.
[2] In military terms, an infantry division at full strength = 20,000 men.

Seaborne Weapons

Aircraft Carriers:
The most important weapon of the Pacific War, a truly 3D weapon! This is a huge flat-topped ship capable to going around the world and launching attacks of fighter plans or bombers. Only 21 in world today!

- *Akagi, Hiryu, Soryu* (IJN)
- *Lexington, Enterprise, Yorktown* (USA)

Amphibious Vehicles. To transport troops quickly ashore from main ship. Example:
DUKW boats (now used for Boston tourists).

"We came across throngs of Polish troops, against which our 100-lb fragmentation bombs were deadly," one German *Stuka* pilot recalled. "After that, we went almost down to the deck firing our machine guns. The confusion was indescribable."

Land-based Weapons

Tanks/Armored Vehicles:
Revolutionized modern warfare. Offensives are faster, can defeat entrenched infantry. Grouped together in an "Armored Division,"[3] tanks & armored personnel carriers drive deep into enemy territory in a short time. Together with air forces, tanks were the main component of the successful German *blitzkrieg*. Examples:

- *Panzer* (Germany)
- T-34 (Soviet Union-*best tank of the war*)
- Sherman (USA)

Intelligence/Scientific Breakthroughs:

- Nearly unbreakable codes, using mechanical algorithms (IJN-25)[4]
- More sophisticated code-breakers (Bletchley Park, Station HYPO[5])
- **Radar** (Radio Detection and Ranging); **Sonar** (Sound Navigation and Ranging)

*Two similar but different technological advances that figured prominently in the Allied victory in World II were radar and sonar, both techniques for detecting the location and speed of enemy aircraft or submarines. ***Radar*** played a critical role in the British victory in the Battle of Britain, an aerial battle fought that began in August 1940. At that time, Britain stood alone in the war in Europe, the German army having defeated the French in June of 1940. By August, Hitler started planning an invasion of Great Britain, but first he had to deal with the British air forces. The British had only 800 aircraft to try to hold back the onslaught of over 3,000 German planes. The British victory in this battle was largely due to a series of radar stations that had been built along the south and east coasts of Britain in 1939. These radar stations enabled the British to determine the direction, altitude, and speed on oncoming German aircraft while they were still 50 to 60 miles away, and thus concentrate their limited fighter forces against them. ***Sonar*** was used by the Allies to spot German U-Boats and Japanese submarines.

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[3] The Armored Division with air support was fast and devastating. This was the main tool of the German Army in its conquest of Europe. The number and strength of armored divisions determined the land war.
[4] John Keegan, *Intelligence in War* (NY: Knopf, 2003).
[5] The decryption of the IJN code by HYPO led to a prediction of enemy activity: "That forecast was the most stunning intelligence *coup* in all of naval history" (Keegan, 210).

German Infantry Division Strength at start of WWII