

The slide features a white central area with the title 'WWII Air Combat' in a black, sans-serif font. The background is composed of geometric shapes: a dark grey triangle in the top-left, a light grey trapezoid in the top-right, a light grey trapezoid in the bottom-left, and a yellow trapezoid in the bottom-right. All shapes are separated by thin white lines.

WWII Air Combat

The players

Luftwaffe

Royal Air Force (RAF)

United States Army Air Force (USAAF)

The planes

Bombers

Slow

Poor maneuverability

Heavily armored

Long range

Fighters

Fast

Maneuverable

Interdiction (and later escort)

Uses

Strategic bombing

- Targeted civilian infrastructure

- Used primarily by the RAF and USAAF

Tactical bombing

- Targeted military infrastructure and personnel

Notable bombing events

Doolittle raid

Berlin attack

D-Day

Hiroshima and Nagasaki

Air defenses

Fighters

Anti-air artillery

Counter-defenses

Escort fighters (later)

Armed bombers



B-17 Flying Fortress

Strategic bombers

Long range

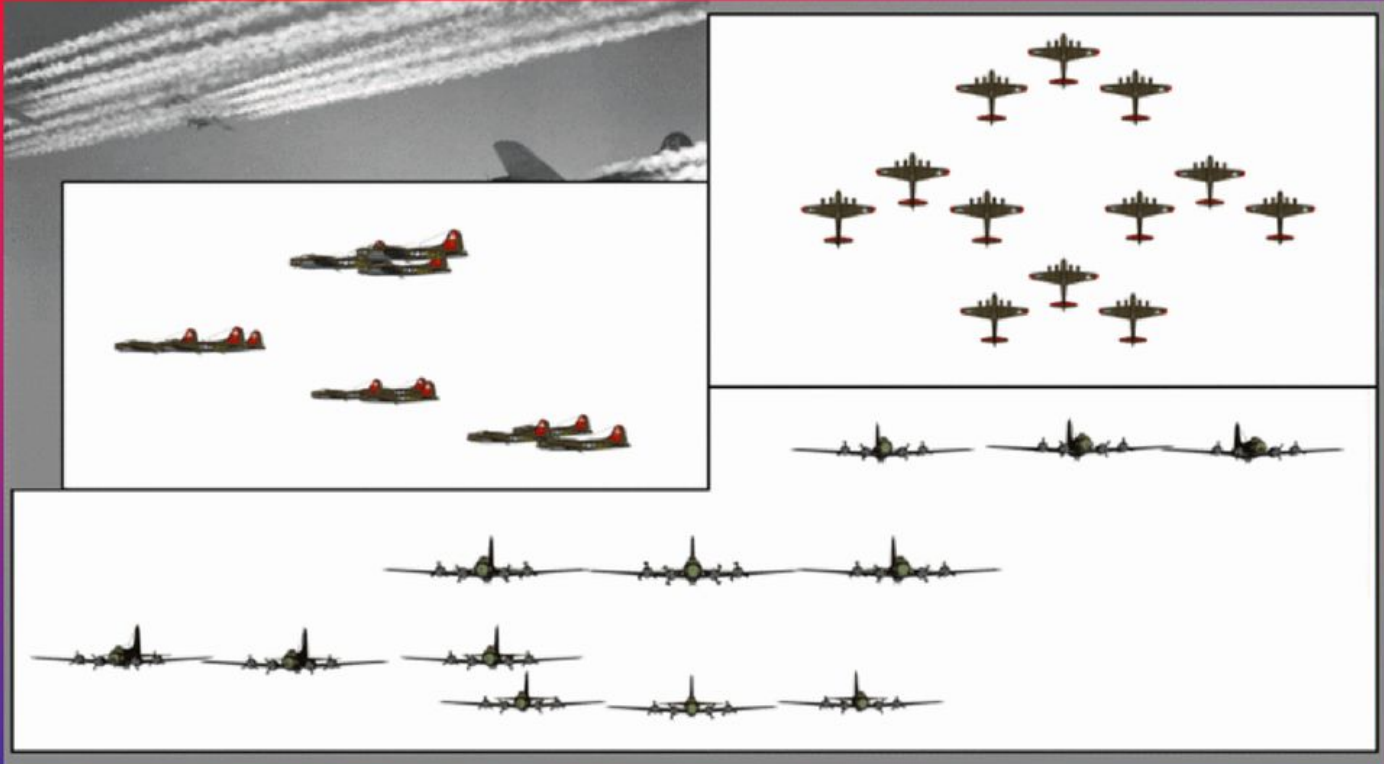
B-17E was built with a focus on offensive capabilities

Many machine guns

Formations

“Heavy bombers flew in formation because, that was the most effective tactics against the enemy flak and fighter defense. In a survey in 1943, it was discovered that just over half of the bombers shot down by the Germans during attacks on target in Europe were those that left the main formation.”

<https://b17flyingfortress.de/en/details/formationsflug>



Combat box formation used prior to escort fighters

Formations Cont.

Escort Fighters

Long range fighters

- Protected bombers

- Established air supremacy

Allowed the USAAF to continue daytime bombing operations



P-51 Mustang

First long-range fighter used by the Allies

P-51s as Escort Fighters

P-51s quickly outclassed the Luftwaffe's Messerschmitt Bf 119 and Focke-Wulf Fw 190A

Sent ahead to engage enemy interceptor fighters and establish air supremacy

Heavily diminished the threat to bombers by the end of 1944

Sent to strafe enemy airfields when returning from escort missions

Quick stats

Killed millions of civilians, mostly in Japan, Germany, the USSR, and China

Heavy industrial damage

Estimated aircraft losses (total)

RAF ~ 42,010 in Europe

USAAF ~ 38,418 in Europe

Germany ~ 76,785

100,000s of aircraft produced during and during the war