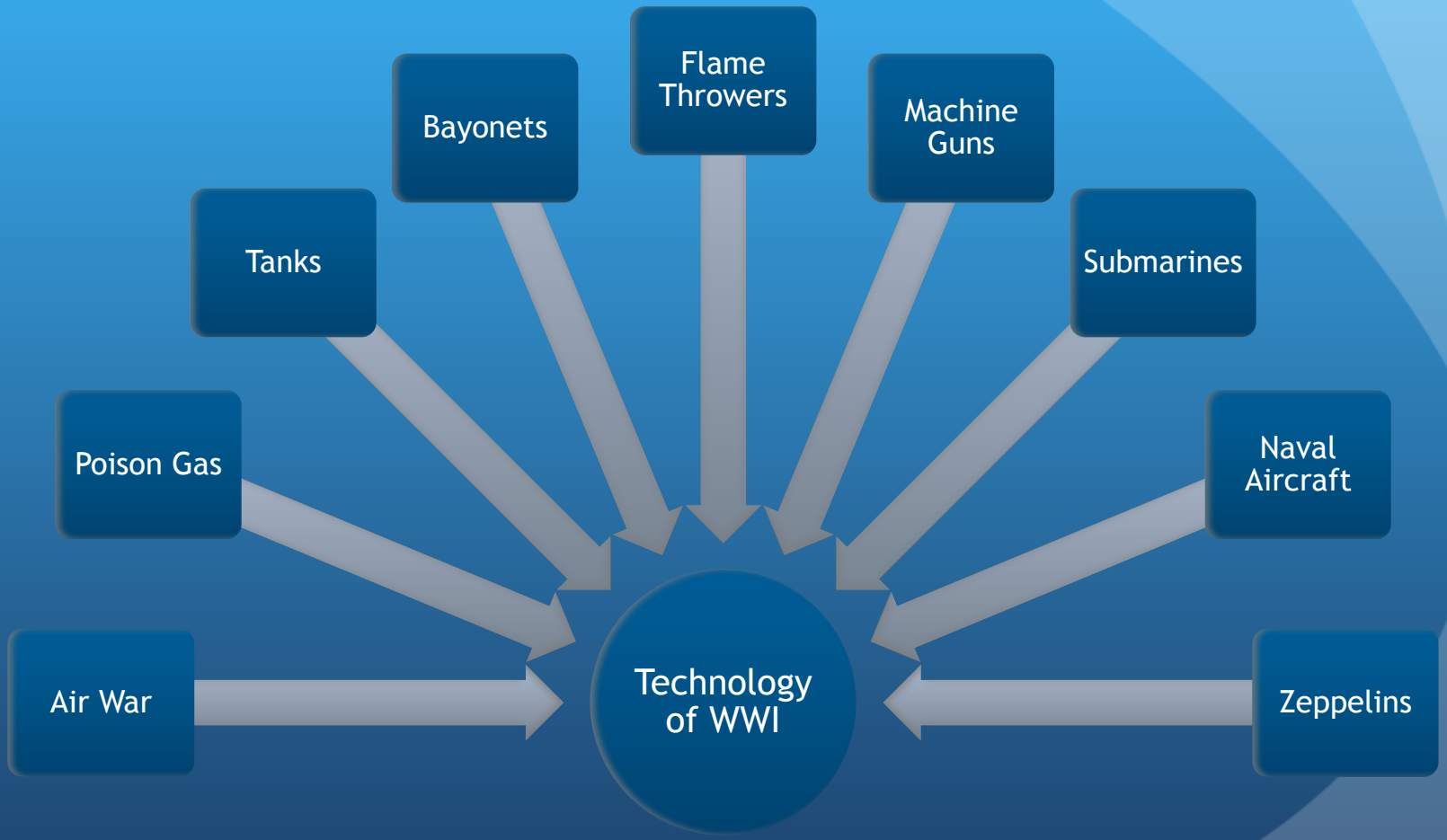
World War I
Warfare Technology

Warfare Technology- Notes



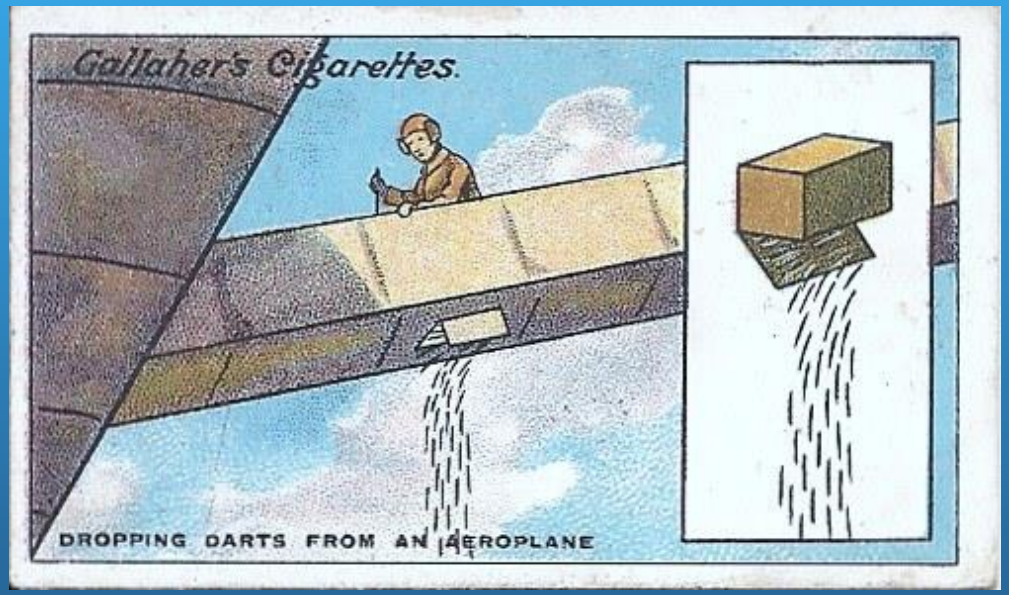
Where's Waldo in WWI

NEW WEAPONS AND WARFARE

Uses and Impact of Airplanes

- First used for RECONAISSANCE
- Later used in air to surface and air to air combat
- Could attack targets behind enemy lines
- Would you go up in a plane that looked like this?

WWI air darts dropped from bi-planes



Lethal 5 inch air darts were dropped from British planes in batches of 500. 31 years after they were dropped the US dropped the first atomic bomb onto Japan.

THE ZEPPLIN: BLIMPS

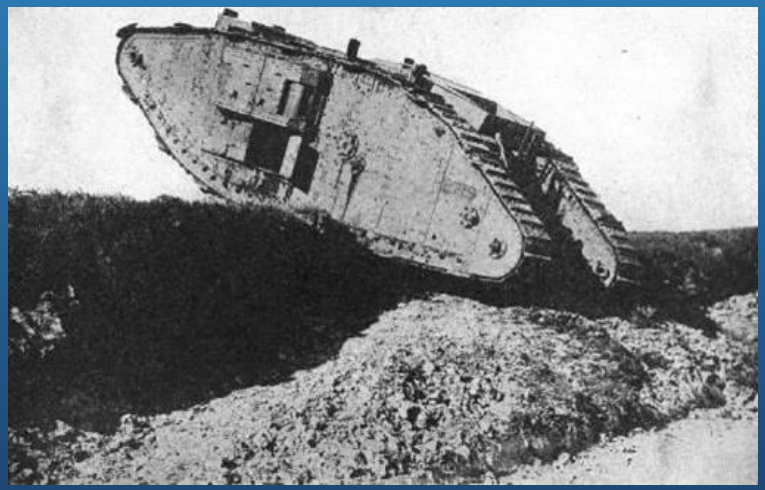
- By 1917 they could stay in the air for more than 95 hours at a time.
- PICTURES were taken of troop positions from blimps during various battles
- Extremely VULNERABLE to attack (very slow).

Was this technology successful?

Tanks

- The BRITISH guided the first D1 tank into action in 1916 against the Germans.
- Initial tank attacks were successful, but early tanks were UNRELIABLE.
- They often BROKE down and became ditched - i.e. stuck in a muddy trench - more often than anticipated.

Was this technology successful?



German Tank and US tank above

Impact of Tanks

- Used to clear the way for infantry

- Had a profound IMPACT on the way battles were fought.

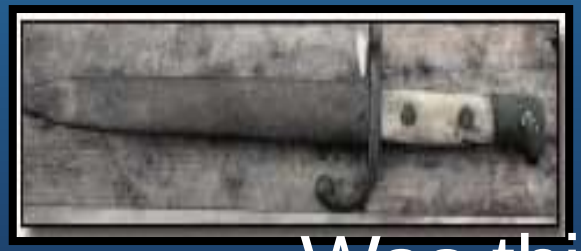
French Tank and British above

Real benefit will be seen in WWII.

Was this technology successful?

Flame Throwers & Bayonets

- Flame Throwers- Spread fire by launching burning fuel
- Bayonet- Simple Design, psychologically damaging
- Not taught how to use it properly
  - Aim for left or right breast, left or right groin, and throat
- Used for close fighting
  - Other uses: Toasting bread, opening cans



Was this technology successful?

MUSTARD GAS

✓ MUSTARD GAS was created by the GERMANS in 1917.

✓It was called mustard gas because of its SMELL, it was also the most effective chemical weapon of WWI because it penetrated anything, masks, clothes, it vaporized relatively easily depending on the weather conditions . It was also easy to deliver

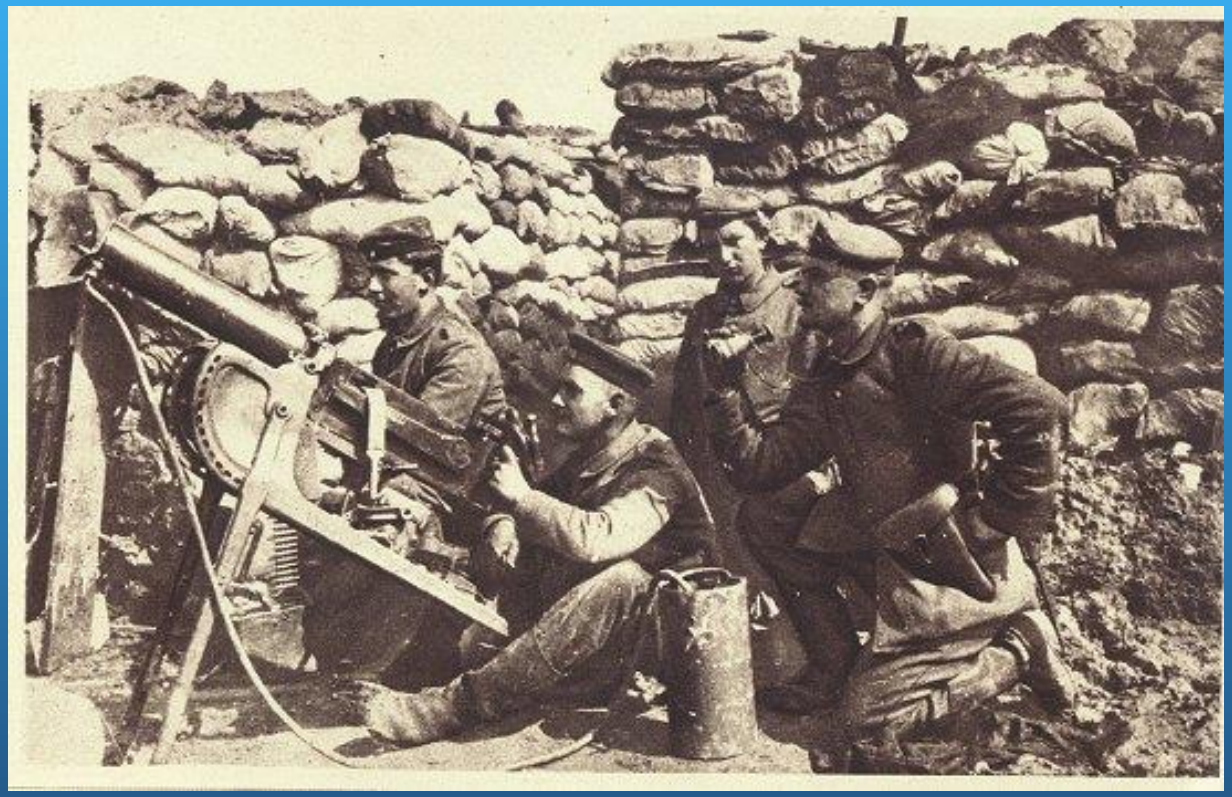
Was this technology successful?

Casualties from gas

Country	Total Casualties	Death
Austria-Hungary	100,000	3,000
British Empire	188,706	8,109
France	190,000	8,000
Germany	200,000	9,000
Italy	60,000	4,627
Russia	419,340	56,000
USA	72,807	1,462
Others	10,000	1,000

Was this technology successful?

MACHINE GUN



•Fired some 400-600 small-caliber rpm

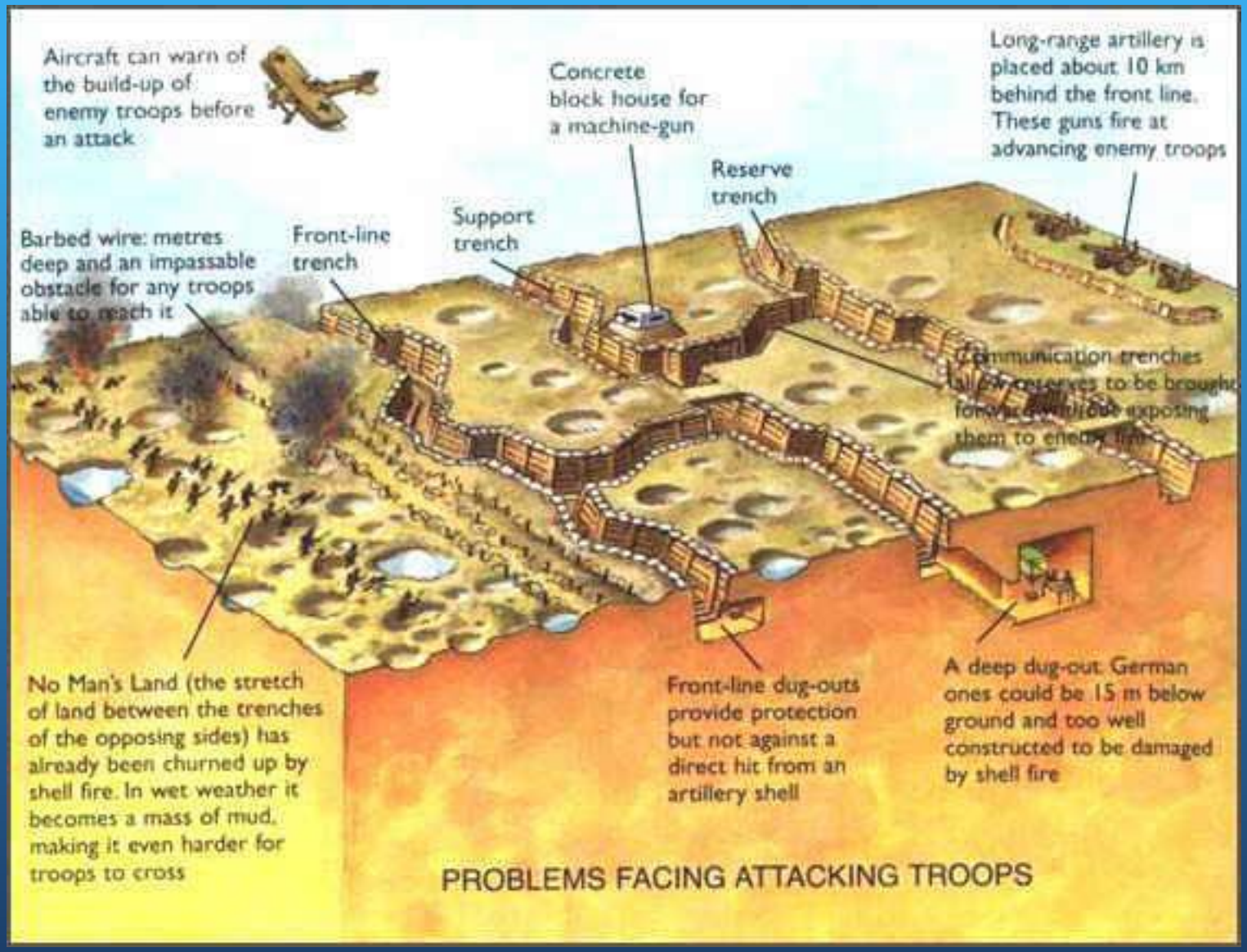
Fired 800-1200 by the (end of the war)

U-BOAT

- **The U-boats were first invented by Germany. On 5th September 1914, the underestimated U-boats were finally able to show their deadly potential and draw first blood.**

Was this technology successful?

THE TRENCH


Aircraft can warn of the build-up of enemy troops before an attack
Concrete block house for a machine-gun
Long-range artillery is placed about 10 km behind the front line. These guns fire at advancing enemy troops
Reserve trench
Support trench
Front-line trench
Barbed wire: metres deep and an impassable obstacle for any troops able to reach it
Communication trenches
No Man's Land (the stretch of land between the trenches of the opposing sides) has already been churned up by shell fire. In wet weather it becomes a mass of mud, making it even harder for troops to cross
Front-line dug-outs provide protection but not against a direct hit from an artillery shell
A deep dug-out. German ones could be 15 m below ground and too well constructed to be damaged by shell fire
PROBLEMS FACING ATTACKING TROOPS

Life in the trenches

TRENCH WARFARE SIMULATION

TRENCH WARFARE SIMULATION

HOW DO YOU TAKE THE OTHER SIDE MOST EFFECTIVELY USING THE NEW WEAPONS OF WAR?

Trench Foot

THE END

Where's Waldo in WWI

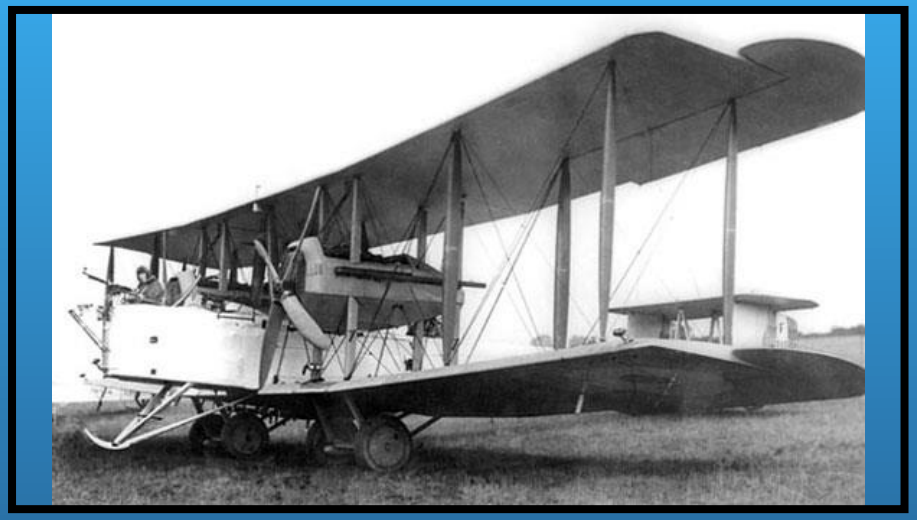
NEW WEAPONS AND WARFARE

I added some extra slides

Airplanes

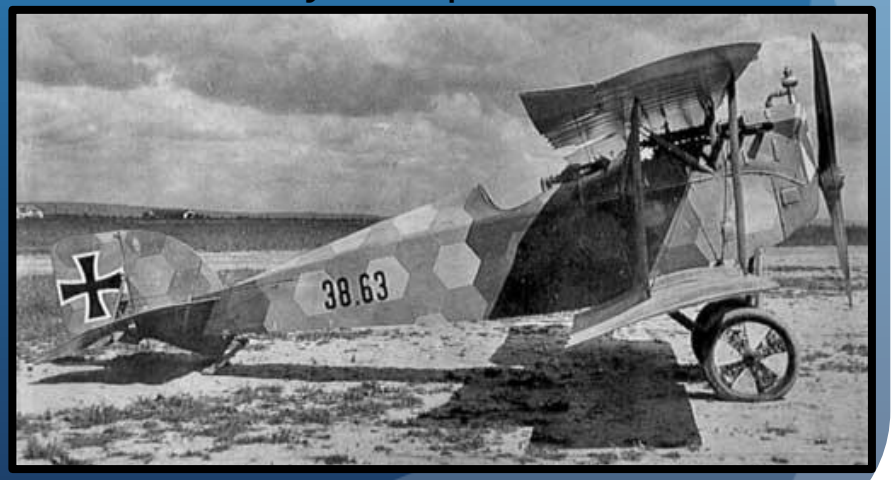
- 1st War that used Airplanes
  - Training: Limited! A few hours
  - "Pusher": Propeller faced backwards, pushed airplane forwards
  - "Tractor": Propeller faced forwards, pulls plane forwards
  - Usage: Observation, Naval Warfare, strategic bombing, ground attacks

Airplane Photos



Great Britain- 1918

Germany's Airplane 1915



Machine Guns

- Took 4-6 men to operate, by 1918: one man operating
- Many problems existed with the machine gun
- Jammed within a few minutes, hot weather temps, overheat
- Eventually- became mobile, use for naval aircraft and tanks

Zeppelins

- Cigar shaped balloon carrying gas balloons “airships”
- Multiple engines
- Fly in specific directions
- Preferred by Germany- cheaper