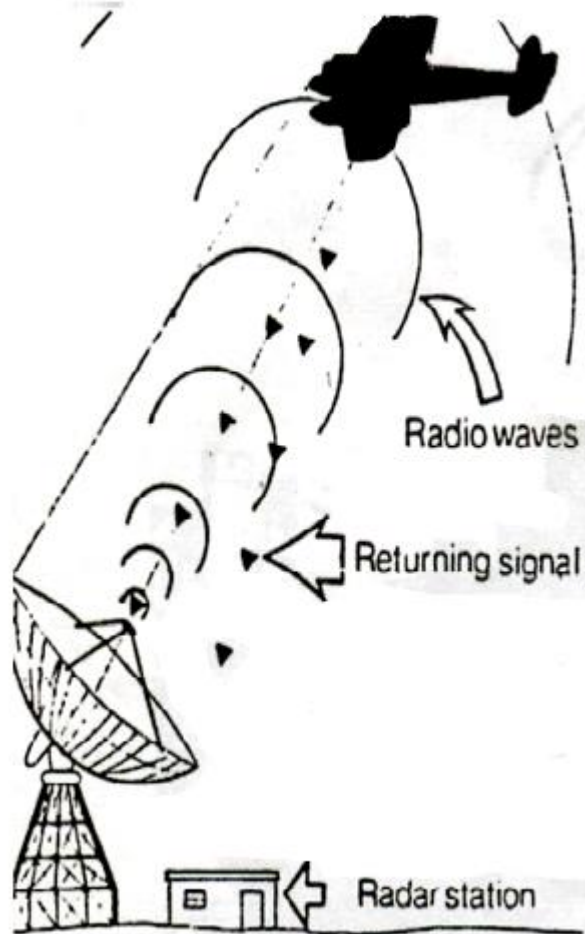


How Radar works.



The Battle of France is over. The Battle of Britain is about to begin. Upon this battle depends the survival of Christian civilization... Hitler knows that he will have to break us in this island or lose the war... Let us therefore brace ourselves to our duties, and so bear ourselves that, if the British Commonwealth and Empire lasts a thousand years, men will still say, *This was their finest hour.*

Winston Churchill, speaking in the House of Common (11 June 1940).

The gratitude of every home... goes out to the British airmen who, undaunted by odds, unwearied in their constant challenge and mortal danger, are turning the tide of world war by their prowess and by their devotion. Never in the field of human conflict was so much owed by so many to so few.

Winston Churchill, in the House of Commons, 20 August 1940

Explanation: 'Never in the field of human conflict [=war] was so much [=freedom] owed by so many [=the people of Britain] to so few [the pilots of the RAF]'.

RAF casualties in 1940.

Pilots		Killed in action
1822	RAF	339
56	Fleet AIR ARM	9
21	Australian	14
73	New Zealander	11
88	Canadian	20
21	South African	9
2	Southern Rhodesian	0
8	Irish	0
7	American	1
141	Polish	29
86	Czech	8
26	Belgian	6
13	Free French	0
1	Israeli	0

RAF aircraft losses.

Spitfires	357
Hurricanes	601
Blenheims	53
Other	74

Luftwaffe aircraft losses.

Messerschmitt Bf 109	533
Messerschmitt Bf 110	229
Heinkel He 111	246
Junkers Ju 88	281
Dornier Do 17	171
Junkers Ju 87	74
Dornier Do 215	6
Heinkel He 115	28
Henschel Hs 126	7
Heinkel He 59	31
Other	46

Source C A 'dogfight'

There's one coming down in flames – someone's hit a German and he's coming down – there's a long streak – he's coming down completely out of control – a long streak of smoke – ah, the man's baled out by parachute – the pilot's baled out by parachute and he's going slap into the sea and there he goes sma-a-ash. Oh boy, I've never seen anything as good as this. The RAF fighters have really got these boys taped.

Charles Gardner's live BBC radio description of a 'dogfight' (a fight between two planes) over Kent, 10 July 1940

SOURCE 1 Directive No. 17 from Hitler, 1 August 1940

Top Secret

In order to establish the conditions necessary for the final conquest of England, I intend to continue the air and naval war against the English homeland more intensively.

- The German airforce is to overcome the British airforce as soon as possible.
- The intensified air war may commence on or after 6 August.

Source D The balance of forces



A German plane approaching Britain. At the beginning of the Battle of Britain the Luftwaffe had 2,670 planes whilst the RAF had only 600. Despite this, by careful planning and tactics, the RAF was able to shoot down enough German planes to give the impression that it was not worthwhile for the Germans to continue daytime raids.

Source F The impact of the Battle of Britain

**"NEVER WAS SO MUCH
OWED BY SO MANY
TO SO FEW"**
THE PRIME MINISTER

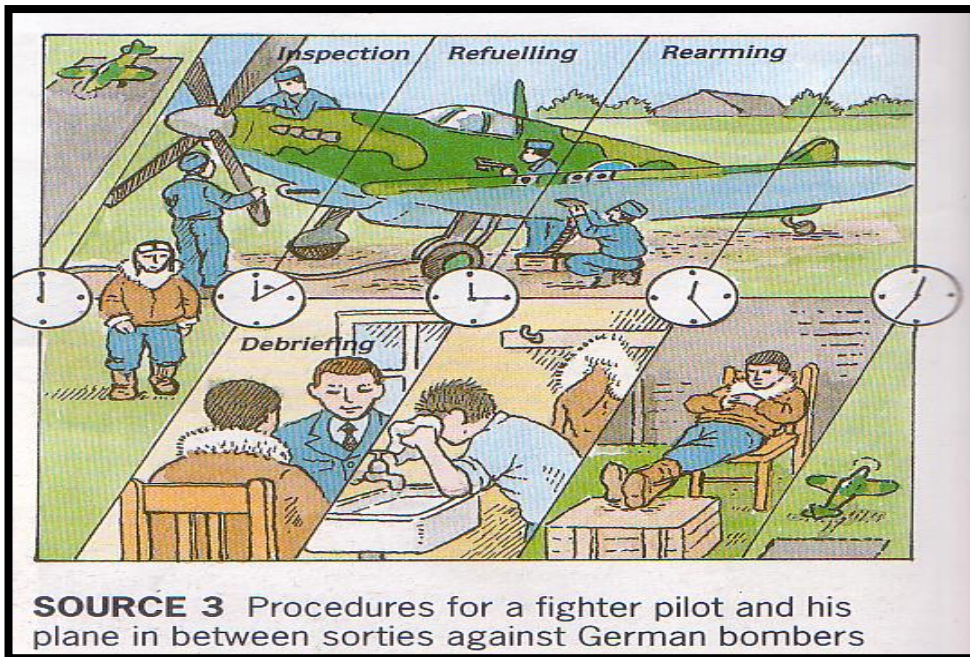


The poster on the left includes a famous line from a speech made by Churchill on 20 August 1940. The poster on the right advertises a film released in 1942.

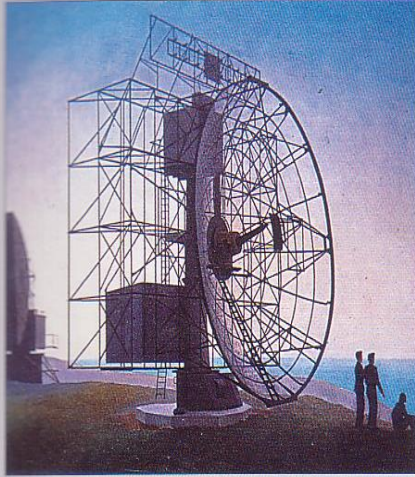


SOURCE 4 British and German aircraft destroyed 1 July–31 October 1940

	British	German
1–15 July	51	108
16–31 July	69	117
1–15 August	156	259
16–31 August	249	332
1–15 September	268	323
16–30 September	133	213
1–15 October	100	147
16–31 October	90	161
Totals	1116	1660



Source E Radar - an early warning system



I was one of the first WAAF's to train as a radar operator. At 1 pm on 18 August 1940 our screens showed a big raid building up over France. Sergeant Blundell ordered me over to the bomb-proof building. No sooner had I sat down than he rang through telling me to 'duck' as raiders were approaching. I told him I couldn't leave my post as so much information was coming in. He said, 'I'll leave it to you'. Bombs were already falling on the station and I could hear the scream of the dive bombers as they swooped down. The next thing I knew was that the door had blown in and dust was flying everywhere. Outside there was devastation. I was told that the Germans had dropped about eighty 500lb bombs.

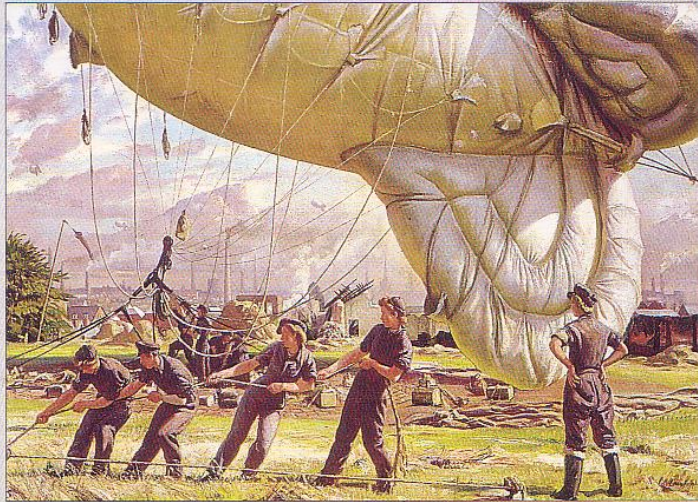
Corporal Avis Hearn quoted in Vera Lynn, 'Unsung Heroines', 1990

A radar station. Radar gave the RAF early warning of a German attack. A network of stations covered Britain. Even when one station had been bombed, other stations continued to work while it was repaired. This gave the impression that bombing them had little effect.

School Textbook, 1985.

Britain won because it had the first modern air-defence network based on new technology - [radar](#). So Hitler turned to bombing Britain's cities, hoping for a British surrender by reducing industry to rubble and weakening the will of the British people. Although many were killed, the factories kept working while the relentless terror bombing only united the British people in their determination to beat the Nazi foe.

Source B WAAFs and the Battle of Britain



Although all RAF pilots were men, there were 8,000 women in the Women's Auxiliary Air Force (WAAF). This picture shows WAAFs raising a barrage balloon. These balloons prevented German planes flying low.

SOURCE 7 A Spitfire pilot recalls his experiences of the Battle of Britain

Throughout it all the radio is never silent – shouts, oaths, encouragements and terse commands. You single out an opponent. Jockey for position. All clear behind! The bullets from your eight guns go pumping into his belly. He begins to smoke. But the wicked tracer sparkles and flashes over the top of your own cockpit and you break into a tight turn. Now you have two enemies. The [Messerschmitt] 109 on your tail and your remorseless ever-present opponent 'G', the force of gravity. Over your shoulder you can still see the ugly, questing snout of the 109. You tighten the turn. The Spit [Spitfire] protests and shudders and when the blood drains from your eyes you 'grey out'. But you keep turning, for life itself is the stake. And now your blood feels like molten lead and runs from head to legs. You black out! And you ease the turn to recover in a grey, unreal world of spinning horizons. Cautiously you climb into the sun. You have lost too much height and your opponent has gone – disappeared. You are completely alone in your own bit of sky, bounded by the blue vault and the coloured drapery of earth below.

2. Which of Sources 5 and 6

Source A

What General Weygand (the French Commander) called the 'Battle of France' is over. I expect that the Battle of Britain is about to begin. The whole fury and might of the enemy must very soon be turned on us. Let us therefore be prepared to do our duty so that, if the British Empire lasts for a thousand years, men will say, 'This was their finest hour'.

Radio broadcast by Winston Churchill, 18 June 1940

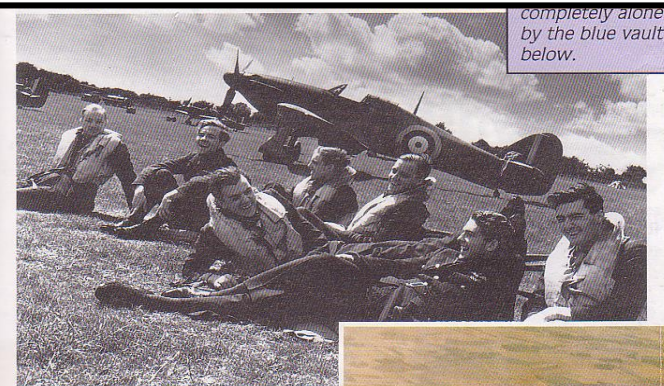
The British have lost the war but they don't know it. One must give them time and they will come round.

Adolf Hitler, June 1940

SOURCE 2 A German Intelligence Report on the RAF, July 1940

The British aircraft industry produces about 180 to 330 fighters a month. It is believed this output will decrease.

Both the Hurricane and the Spitfire are inferior to the Messerschmitt. The Luftwaffe is clearly superior to the RAF as regards equipment, strength, training, command and location of bases.



SOURCE 5 A photograph of British pilots between sorties, summer 1940

completely alone in
by the blue vault a
below.