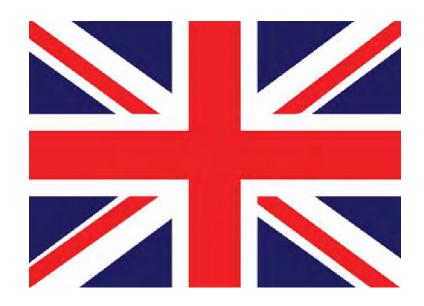
## THE BATTLE OF BRITAIN: MANKIND'S FINEST HOUR

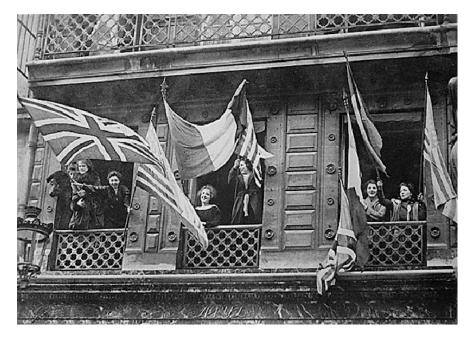


# WEEK ONE: 1918-1940

## FROM ARMISTICE TO THE BATTLE OF FRANCE

#### THE WAR TO END ALL WARS





## FROM VICTORY TO DEPRESSION

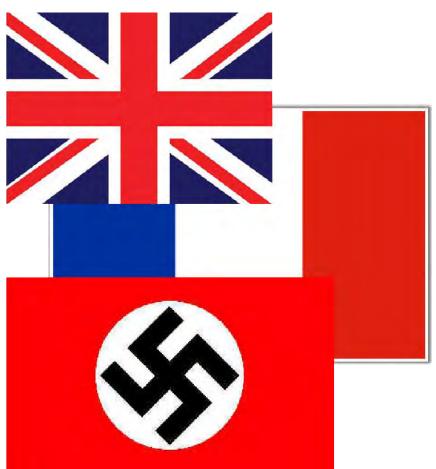
- DEMOBILIZATION FOLLOWS END OF WAR
- STOCK MARKETS COLLAPSE IN 1929
- WORLD ECONOMIES IN TATTERS
- MASSIVE UNEMPLOYMENT
- GUNS VERSUS BUTTER

## WIDESPREAD OPPOSITION TO ANOTHER WAR

- MASSIVE WORLD WAR I CASUALTIES
- "THE BOMBER WILL ALWAYS GET THROUGH"
- CIVILIANS WIDELY SEEN AS VULNERABLE
- MINUTES TO OVERFLY ENGLISH CHANNEL
- FEAR OF GLOBAL CATASTROPHE

THREE MAJOR EUROPEAN POWERS DOMINATE THE CONTINENT

- FRANCE GERMANY – BRITAIN
- OPPOSING SECURITY SCHEMES
- DISARMAMENT
  PACTS POPULAR



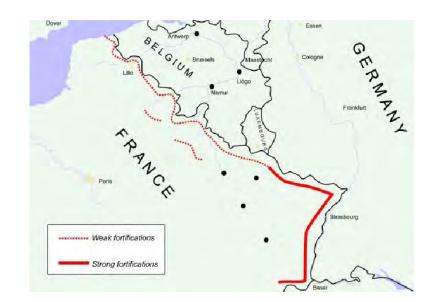
#### BRITAIN RULES THE WAVES

- 300 YEARS OF DOMINANT SEAPOWER
- NO INVASION SINCE 1066
- ENGLAND PROTECTED BY THE CHANNEL
- ARMY DEPLOYED
  ACROSS THE EMPIRE



#### FRENCH BUILD MAGINOT LINE

- FROM SWITZERLAND TO BELGIUM
- KEEP THE HUNS OUT!
- VULNERABLE TO FLANKING
- PERFECT FOR THE LAST WAR



## <u>GERMANS REARM BY</u> <u>STEALTH</u>

- STEEL INDUSTRY EXPANDS CAPACITY
- PANZER CORPS FORMED
- LUFTWAFFE SECRETLY ESTABLISHED
- NAVY EXPANDS BUT NOT ENOUGH



#### <u>1936-1939</u> THE SPANISH CIVIL WAR

- BERLIN SUPPORTS FRANCO'S FASCISTS
- NAZIS DEVELOP AIR-GROUND TACTICS
- LUFTWAFFE GAINS COMBAT EXPERIENCE
- USE OF TERROR BOMBING OF CIVILIANS



## <u>GERMANY ANNEXES</u> <u>TERRITORY</u>

- THE DANZIG COORIDOR TO THE BALTIC SEA
- THE AUSTRIAN ANSCHLUSS
- SUDENTLAND OCCUPATION
- CZECHOSLOVOKI A OCCUPIED



# **1930'S DIPLOMATIC MOVES**

- SUCCESSIVE ATTEMPTS TO PREVENT WAR
- ALLIES FAIL TO IMPRESS OR STOP HITLER
- "PEACE IN OUR TIME" WIDELY APPLAUDED
- IN REALITY IT'S APPEASEMENT



## BRITAIN FINALLY SEES THE LIGHT

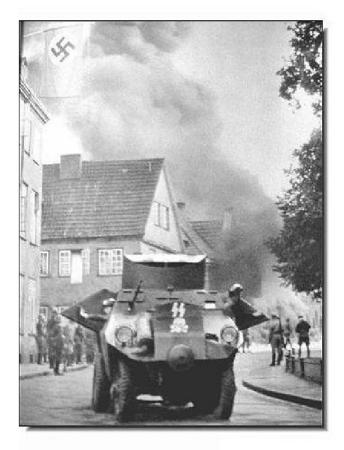
- CHURCHILL WARNS OF NAZI INTENTIONS
- LONDON FUNDS HURRICANES/SPITFIRES
- RADAR GETS INCREASED ATTENTION
- TOO LITTLE AND TOO LATE??!!



## <u>SEPTEMBER 1, 1939</u>

## **GERMANS INVADE POLAND**

- BERLIN CLAIMS SELF-DEFENSE
- UNANTICIPATED CONSEQUENCES
- BRITAIN AND FRANCE
  DECLARE WAR
- QUICK VICTORY OVER WEAKER OPPONENT
- GERMAN ARMY RUNS OUT OF AMMO
- COMMAND AND CONTROL WEAKNESSES



HISTORY IN PICTURES IncredibleImages4u.blogspot.com

## NOVEMBER 1939-MARCH 1940 "THE PHONY WAR"

- GERMANY PLANS A FRENCH INVASION
- SEVERE WINTER DELAYS MOVES
- ALLIES HUNKER DOWN AND WAIT
- GERMAN PLANS CAPTURED BUT IGNORED

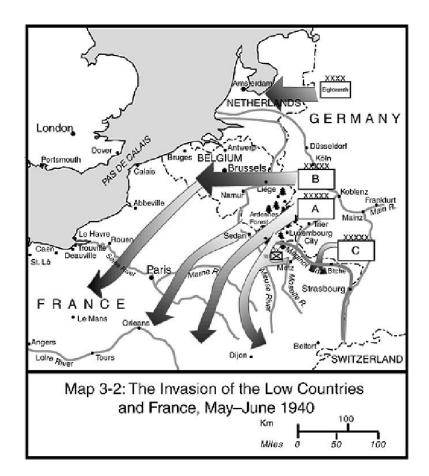
## <u>APRIL 1940:</u> NORWAY IS INVADED

- NAZIS REPEL OPPOSING BRITISH FORCES
- BUT LOSE MANY DESTROYERS
- PROVIDES NAVY WITH ATLANTIC ACCESS
- ADJACENT TO IRON ORE DEPOSITS



## MAY-JUNE 1940 THE BATTLE OF FRANCE

- GERMAN MULTI-PRONG OFFENSE
- RADICAL PUSH THROUGH ARDENNES
- LUFTWAFFE SUPPORTS TANKS
- BERLIN CONTROLS PACE OF BATTLE



## **BLITZKREIG OVERWHELMS**

- AN ALL OR NOTHING GAMBLE
- GERMANY ANXIOUSLY ROLLS THE DICE
- IF GERMANY LOSES THEY ARE FINISHED
- RAPID ADVANCE CRUSHES LOW COUNTRIES



#### HOW DID GERMANS PREVAIL?

- PANZERS EMPHASIZE SPEED
- BYPASS FIXED DEFENSES
- FLEXIBILITY IN TACTICS
- AVOID SET PIECE BATTLES OF EARLIER WARS



#### **ALLIES HAVE LARGER FORCES**

- MORE TANKS WHICH LACK RADIOS
- MORE TROOPS THAT SLOWLY MOVE
- MORE AIRCRAFT DESTROYED ON GROUND



## FRENCH ARE ROUTED

- OUTGENERALED BY GERMANS
- ROADS CLOGGED BY FLEEING REFUGEES
- INEFFICIENT ARMOR REFUELING
- BICKERING AMONG ALLIED COMMANDERS



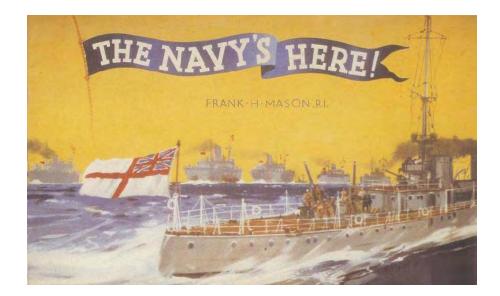
#### **ALLIES FLEE TO CHANNEL PORTS**

- IMPENDING DESTRUCTION OF BEF
- LUFTWAFFE TAKES LEAD ROLE NOT ARMY
- PROMISES TO DESTROY ALLIED ARMIES
- CHURCHILL ORDERS OPERATION DYNAMO



## "HEROES ALL OF THEM"

- NAVY/CIVILIAN SHIPS RACE TO FRANCE
- RESCUE OVER 233,000 TROOPS
- WITHSTAND REPEATED AIR ATTACKS
- BEF LIVES TO FIGHT ON



#### **FACTORS IMPACTING DYNAMO**

- NEAR-PERFECT WEATHER FOR NINE DAYS
- FLAT, CALM SEAS
- SMOKE, CLOUDS, RAIN HIDE BEACHES
- HITLER'S UNEXPLICABLE DECISIONS

## **BERLIN DITHERS AND WAITS**

- PANZERS WOULD HAVE OVERRUN PORTS
- A MAJOR STRATEGIC FAILURE
- BRITAIN WOULD LIKELY HAVE SURRENDERED
- PRECLUDING U.S. 1942-1945 BASING
- DETERMINED OUTCOME OF THE WAR

#### THE BATTLE OF FRANCE ENDS

- BRITISH LEAVE EQUIPMENT BEHIND
- ENGLAND STANDS ALONE AGAINST BERLIN
- NAZIS RULE FROM NORWAY TO SPAIN
- GERMANS SURPRISED BY QUICK VICTORY
- FRANCE PARTITIONED AND CONQUERED





#### WEEK TWO: WAR COMES TO BRITAIN



## GERMANY HAS A DILEMMA NOW WHAT DO WE DO?

•ENCOURAGE UK TO QUIT? INVADE ACROSS CHANNEL? •BOMB THEM INTO SUBMISSION? •STRANGLE ECONOMY WITH U-**BOATS**?



## THE BRITISH REGROUP

- LONDON MANAGES WAR INFORMATION
- 200,000
  ADDITIONAL
  TROOPS SAVED
- CHURCHILL: THE DEFIANT LION
- OUTREACH TO USA



" VERY WELL , ALONE "

# **DIGGING IN TO DEFEND**

- ENGLISH CHANNEL IS MINED
- PILLBOX LINE ACROSS COUNTRY
- ANTI-TANK TRAPS
- 1 MILLION MOLOTOV COCKTAILS
- "TAKE ONE WITH YOU"

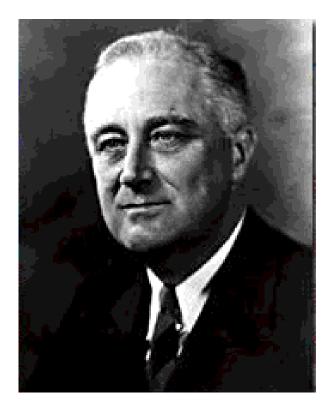


## US AMBASSADOR OF DEFEATISM

- JOE KENNEDY PREDICTS SURRENDER
- NO US EQUITIES
- FLEES TO COUNTRY DURING AIR RAIDS
- "MORE YELLOW THAN A DAFFODIL"



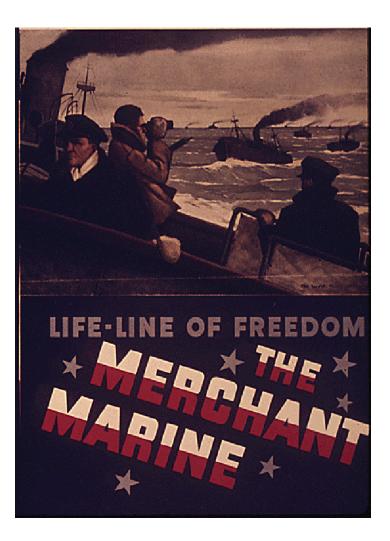
#### **ROOSEVELT'S DELICATE BALANCE**



- US OVERWHELMINGLY ANTI-WAR
- "THEIR PROBLEM, NOT OURS"
- AMERICANS INITIALLY UNRESPONSIVE

## US COMES AROUND SLOWLY

- SHIPS 250K RIFLES JULY 1940
- 5,000 TOMMY GUNS A MONTH
- 900 75MM FIELD GUNS
- 1 MILLION ARTILLERY SHELLS
- FOOD SHIPMENTS



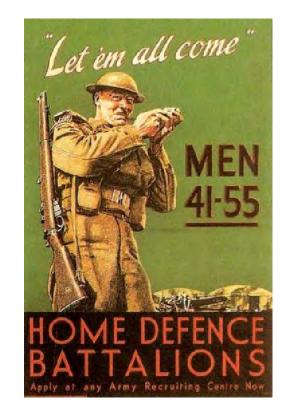
## GERMANY PRESSES THE ATTACK



- STRENGTH IN NUMBERS AND EXPERIENCE
- DRAW OUT FIGHTERS
- ATTACK CHANNEL SHIPPING
- PROBING FOR WEAKNESS

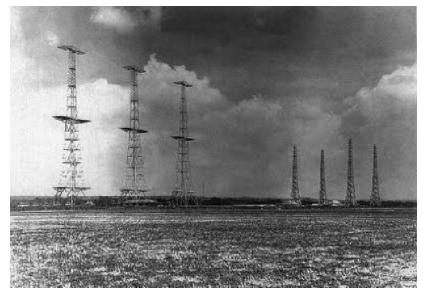
## BRITAIN WORKS ON SOLUTIONS

- EMBRACING RADAR DETECTION
- ACCELERATE AIRCRAFT PRODUCTION
- HUSBAND FIGHTER RESOURCES
- THE HOME GUARD





## AIR RAID DETECTION VITAL



- SYSTEM IN PLACE BY LATE 1930s
- PROVIDES EARLY WARNING
- ALLOWS RAF TO PREDICT TARGETS



### ENGLAND INTEGRATES DEFENSES



- RADAR INFO SHARED
- OBSERVER CORPS REPORTS
- SIGNALS INTELLIGENCE
- FIGHTERS PROTECT ASSIGNED SECTORS
- TRI-SERVICE COOPERATION
- BARRAGE BALLOONS

### ASSETS ARE STRETCHED

- 1500 BARAGE BALLONS
- 1785 AAA GUNS
- FIGHTERS
  CANNOT BE
  EVERYWHERE AT
  ONCE
- AIR-RAIDS ARE DESTRUCTIVE





### **BENTLEY PRIORY**

- FIGHTER COMMAND HEADQUARTERS
- THE BIG PICTURE
- ASSIGNS FIGHTER SQUADRONS



THE BEAUTY CHORUS

### **GERMANS TARGET RAF**

- AIRFIELDS
- REPAIR DEPOTS
- CRATER
  RUNWAYS
- BOMB HANGERS



A German photograph of a Heinkel III dropping its bombs during the Battle of Britain

### LONDON IS BOMBED AUGUST 28/29<sup>TH</sup>, 1940



- AGAINST HITLER'S ORDERS
- CHURCHILL RETALIATES
- GOERING VOWS REVENGE
- ANOTHER STRATEGIC FAILURE

### A GIFT TO THE BRITISH

- ALLOWS RAF TO REGROUP
- REPAIR BASES
- REPLACE AIRCRAFT
- REBUILD FACILITIES



### WAR ON LONDON – THE BLITZ AUGUST 1940-MAY 1941



- A BIG FAT TARGET
- SEAT OF GOVERNMENT
- CENTRE OF COMMERCE
- IMPOSSIBLE TO MISS
- DIFFICULT TO DEFEND

### CIVILIANS TAKE THE BRUNT

- SAVAGE EAST END RAIDS
- COCKNEYS KILLED BY THOUSANDS
- THE PALACE TAKES A FEW
- 30,000 NATIONAL DEATHS BY 1941





### **BALHAM TUBE STATION**



- 14 OCTOBER 1940
- MASSIVE BOMB PENETRATES
- EXPLOSION KILLS 66
- 70+ INJURED
- BODY RECOVERY TAKES 2 MONTHS

### CIVILIANS DEFY LUFTWAFFE

- DEFENDING COMMON IDEALS
- ALL CLASSES COME TOGETHER
- 500K CHILDREN EVACUATED
- "POTS AND PANS FOR SPITFIRES"



### **QUOTES OF THE TIMES**

- LONDON "WE'RE IN THE FINAL NOW...TO BE PLAYED ON THE HOME GROUND."
- LIVERPOOL "FEAR OF INVASION? NO! NOT AT ALL. IT MAY TAKE A WHILE, BUT WE'LL BEAT THEM."
- CHURCHILL "THEY MAY BURN US TO THE GROUND, WE'LL MOVE THE FLEET TO CANADA AND FIGHT ON."

### THE WEAPONS OF WAR

- FIGHTERS CLASH OVER ENGLAND
- BOMBERS EASY TARGETS
- OPPOSING TACTICS
- WHO HAS THE ADVANTAGE?



### SPITFIRES/HURRICANES

### • 60+ SQUADRONS

- PILOT EXPERIENCE EQUALS SURVIVAL
- SHORTENED TRAINING PROGRAMS
- QUICKLY REPAIRED
- PILOTS SHOT DOWN ARE RECOVERED



### MESSERSCHMITTS

- ME-109 AN AIRBORNE TERROR
- MOUNTS CANNON & MACHINE GUNS
- THE FERRARI OF THE SKIES
- PILOTS WHO BAILED OUT CAPTURED



### ME-110 TWIN ENGINE FIGHTER



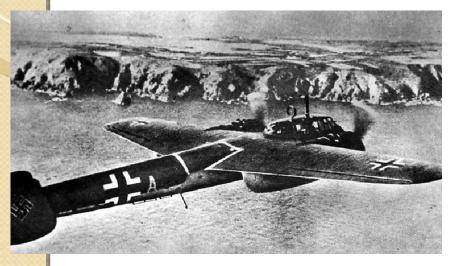
- NO MATCH FOR RAF
- LACKS MANEUVERABILITY
- UNSUITED FOR AIR COMBAT

### WHAT ABOUT STUKAS?

- LETHAL DIVE BOMBER
- TERRIFYING SCREAM
- MANEUVERABLE BUT VULNERABLE
- CANNOT OUTRUN FIGHTERS
- A WEAPON OF TERROR IN EUROPE



### GERMAN BOMBERS ARE TOO SLOW





- DORNIERS/HEINKELS LACK SPEED
- NEED FIGHTER ESCORT
- ATTACKED INBOUND AND OUTBOUND
- NO FOUR ENGINE BOMBERS

### "CROMWELL" **7 SEPTEMBER, 1940**



Bundesarchiv, Bild 1011-MW-5674-Fets: Engelmeisr L 1040

- INVASION ALARM SOUNDED
- HOME GUARD **MOBILIZED**
- PREPARATIONS TO **REPEL LANDINGS**
- TIDES AND WEATHER IDEAL

### BATTLE OF BRITAIN DAY 15 SEPTEMBER, 1940

- LARGE RAIDS AND CLASHES
- HIGH GERMAN LOSSES
- PILOTS EXHAUSTED
- HITLER GIVES UP ON SEA LION





## COULD GERMANS HAVE INVADED?



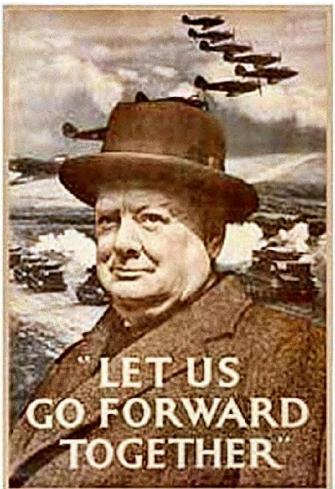
- REQUIRES PERFECT WEATHER
- NAVY MUST TOW BARGES AT NIGHT
- LACK OF
  AMPHIBIOUS
  EXPERIENCE
- NAPOLEON COULD NOT DO IT

# WHAT WOULD HAVE HAPPENED?

- ROYAL NAVY MOBILIZES
- MINEFIELDS NARROW APPROACHES
- DESTROYERS SIN BARGES
- MURDEROUS COASTAL GUNS
- NO QUARTER GIVEN



## WHO REALLY SAVED BRITAIN?



- RAF THE STUFF OF LEGEND
- ROYAL NAVY RUNS THE CHANNEL
- CHURCHILL RALLIES THE NATION
- CIVILIANS REFUSE TO YIELD
- INDUSTRY OUTPRODUCES GERMANS

### MAJOR GERMAN MISTAKES

- DUNKIRK BEF ESCAPES
- BOMBING CITIES, NOT RAF
- UNDERESTIMATING ENGLAND
- OVERESTIMATING SELF
- FAILURE TO PRESS ADVANTAGES
- HITLER'S RUSSIAN
  OBSESSION



### GERMANS INVADE RUSSIA JUNE 1941



- FOCUS ON THE EAST
- DRAWS RESOURCES
- GERMANS NEVER REVISIT BRITISH INVASION

### **QUESTIONS AND COMMENTS?**



