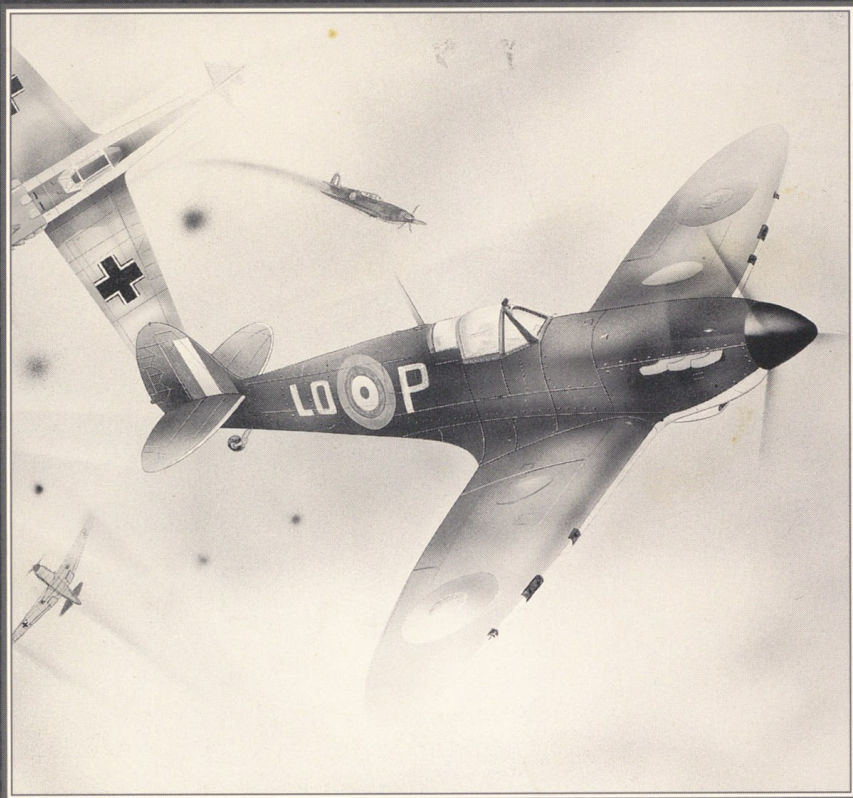


# WW2

## AIRFORCE COMMANDER



## USERS MANUAL

*Impressions*



# **AIR FORCE COMMANDER: World War II**

Impressions Software, Inc.

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## AIR FORCE COMMANDER: World War II

Thank you for buying this game. It has been developed over many months, and is the result of countless hours of game testing, adjusting, and then re-testing. We certainly enjoy the end product, and hope that you will too. We are well aware, though, that our games are not perfect. Please fill out the enclosed warranty card or write us with any comments that you may have. We want to hear what you think, so that we can try to produce better products for you in the future.

If you have any difficulties with this game, please call our Technical Support Line at (617) 225-0848, 9am-5:30pm EST, Monday through Friday. We will be best able to help you if you are at your computer when you call.

**Impressions Software** is currently in the process of implementing a BBS system to provide the latest product information, software updates, and software patches. If you have a modem, you can reach our bulletin board at (617) 225-2042.





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# Introduction and Objectives

Welcome to the World War II edition of Air Force Commander. *Impressions* has taken our sophisticated simulation of strategic air command to the time when air power was truly established as a crucial element in military strategy. We hope you enjoy playing our game in this new theater.

In Air Force Commander: World War II, you are the supreme leader of the combined air forces of your country and your country's allies. It is your task to design a winning strategy for your squadrons and defeat the air forces of your enemy and his allies, played by the computer.

You have three options for reaching this goal. The most straightforward way to win is to achieve air supremacy by making it impossible for your opponent to get his planes off the ground. You can do this by destroying all of his individual planes, destroying his air bases, or blinding him by destroying all his radar stations. If you can keep all of the enemy's forces on the ground for a certain length of time, you will achieve first Air Superiority, and then Air Supremacy, which gives you your victory.

The other two victory options are more subtle and difficult to accomplish. The second way to defeat your opponent is to break the morale of his population through the bombing of civilian targets; this drives up the unrest in his cities, and when it reaches a certain level, his country will no longer be able to continue the fight. The third way is force your opponent to abandon the war for political reasons by bringing the pressure of the media to bear; if you can make the war sufficiently unpopular in his home country, your opponent will have no choice but to withdraw. This is accomplished by denying your opponent the opportunity to achieve his strategic goals. If you frustrate his forces long enough, political pressure against the war will mount until he surrenders. The press is not equally free in every country, however, so the effectiveness of this tactic will vary from scenario to scenario.

All three of these victory conditions are available to your opponent as well, which means that you must keep an eye on civilian unrest and political climate in your own country as you play. If either one reaches a critical level, you could lose the war even though you still have planes in the air.

The two crucial factors you will have to manage, no matter which of the three victory options you choose to pursue, are first, your air strategy, and second, your use of your limited resources. Your air strategy will determine which enemy targets you choose to



attack and with what aircraft. At the same time, your resource management will determine whether your air bases have enough fuel to get your planes off the ground, and whether you have enough resources left over to repair radar stations and other vital emplacements damaged by enemy attacks.

## Installing, Loading, and Exiting the Game

### *Hard Drive Installation*

1. Turn on your machine and wait for the DOS prompt.
2. Insert the game disk, and change to your floppy drive.
3. Type INSTALL <ENTER>
4. Follow the on-screen instructions. AFC:WWII will create a directory and install all the necessary files to that directory.

### *Loading from Hard Drive*

1. At the DOS prompt, change to the game directory.
2. Type AFCWW2 <ENTER>

### *Choosing a Sound Board*

Once you have loaded the game, you will be asked to select a sound board.

Type the letter that appears next to the name of the sound board in your PC and press <ENTER>. If you do not have a sound board, just press <ENTER>.

### *Exiting the Game*

To exit the game at any time, type ALT-X. You will be asked to confirm that you wish to exit to DOS. Your game will not be automatically saved; if you don't want to lose your game, be sure to save it before exiting (see below).





# AFC: WWII Quick Start Tutorial

This section will allow you begin playing *Air Force Commander: World War II* right away, without having to read the entire manual. Follow these instructions to get started on your first scenario. For more detailed information and advanced instructions, refer to the later sections of the manual.

## 1. Start the game

Turn on your machine, change to the directory into which you installed the game, and type **AFCWW2** at the DOS prompt. After you have selected your sound board, the *Air Force Commander: World War II* title screen will appear and music will play. Press <ENTER> to proceed.

Whenever you are told to click your mouse on something, assume that the **left** button is meant, unless the directions specifically say otherwise. In general, clicking the right mouse button will cause you to exit a screen without executing, although there are a few exceptions to this. If you wind up somewhere you didn't intend to go while following this tutorial, try right clicking first; most of the time this will put you back where you want to be.

## 2. Choose a scenario

The first screen you will see is the **Scenario Choice** screen. At the top is a picture of generals debating, and the bottom shows the scenario information. The first column shows what country you will play, and her allies; the second column is your opponent and his allies, if any. It should show Scenario Zero, in which you command the British air forces in Norway against those of Germany in Denmark. Click on "OK". The **Briefing Map** will appear, showing the geographical positions of yourself and your opponent and giving you some historical background on the current scenario. Click on the check mark to begin.

## 3. Pause the game and look around

You will see the **Main Control Panel** appear. At the bottom are several information boxes, and the right side of the screen contains your command buttons. The rest of the screen is taken up by the **Information Map**, which is right now showing the midrange **Radar View**. The instant this map appears, the game has begun; so, to keep from losing in the first few minutes, you'll want to pause the game and look around.



Find the disk icon at the very top of the column of command buttons, on the right, and click on it to bring up the disk options. Click on "Pause this game". The game will halt and you will be automatically taken back to the main control panel. The game will remain on pause until you either go back to the disk icon and manually unpause it, or until you give a command to a unit. Click on the disk icon again; you will see that the pause line now says "Game paused." Click on "Game speed" and select "Slow". You can change the game speed at any point during the game, as many times as you want, by using this option. After you set the game speed, you will be automatically returned to the main control panel.

#### **4. The radar view map**

The information map shows you the radar view of a section of the battle area. Land masses are in black and water areas are in blue. You will see some other terrain features as well, but you may assume that any marking you see that isn't explained here won't affect this tutorial. (See the main manual for details.) Your mouse pointer appears as a rectangular box with X and Y coordinates.

The black peninsula extending downward into the ocean is Norway, the area you are trying to defend. You should be able to see two colored dots on the western edge of the peninsula, one white and one orange. The white dot is your only air base for this scenario, Stavanger. An orange dot marks a military emplacement of some kind; in this case, it's a radar station.

#### **5. Scroll the map to see more**

In approximately the middle of the column to the right of the information map are the map scrolling buttons; they appear as a box of eight outward-pointing arrows surrounding a button with a solid circle on it. Left click on the arrow pointing directly to the right and watch as your information map scrolls in that direction. A short distance to the right of your starting position, you should see two more orange dots. One is a radar station and the other an anti-aircraft battery (you'll be told how to determine the identity of an installation in a moment.) These three military installations plus the crucial air base are the four things you must defend in this scenario.

If you scroll too far in any direction, you will run into an area filled with moving green flecks. This represents radar interference patterns and indicates that you've moved out of the area of your radar coverage. The covered area may change as the game progresses, if the enemy succeeds in destroying any of your radar stations or if you send up pathfinder planes.

#### **6. Locate your opponent's installations**

From studying the briefing map, you know that your enemy's position lies to the south.





To see the German installations, first scroll back to the area where you started (you should see one white dot and one orange dot, remember), then click on the down arrow button to scroll your radar map down.

After scrolling past some water, you will see another peninsula appear on the map, this one extending up from the bottom of the screen. This is Denmark, where the Germans are based. You should see one white dot near the top of the peninsula; this is the German air base at Aalborg. Down toward the base of the peninsula, on the left side, you should see an orange dot; this is a German military emplacement, a radar station. These two installations are the targets you want to attack.

Note that all ground installations of each type are the same color dot, regardless of which side they belong to — all air bases are white dots, whether they have German or British planes in residence, and all military emplacements are orange dots, no matter which country owns them. It is entirely possible to accidentally bomb your own installations if you aren't careful!

### **7. Locate your opponent's planes**

Near the white dot of the German air base, you should see a number of red and white vertical lines of varying heights. If you don't see them, it may be because you paused before the planes could get off the ground; try unpausing the game briefly and then looking again before repausing it.

Each of these lines represents one enemy plane. The height of each line shows the approximate altitude of each plane; the longer the line, the higher up the aircraft is flying. The height of the line will change as the airplane ascends and descends. All enemy craft, regardless of type, appear as red and white lines. Your own aircraft, when you get them launched, will appear as lines of different colors depending on the type of plane.

### **8. The short range reconnaissance view**

Let's take a closer look at your own air base. Position the rectangular box of the mouse pointer over the white dot that represents Stavanger, and click. The midrange radar view map will be replaced by the short-range **Reconnaissance View**. The area that was inside the rectangular box on the radar view now fills the entire information map.

In reconnaissance view, the pointer box with the X and Y coordinates will change to a blue rectangle containing a set of crosshairs and the words "SAT ENH". Land areas are green in color, water areas remain blue, and ground installations and planes are shown as actual pictures, not dots and lines. You should see a cluster of buildings with runways nearby on your screen; this is Stavanger Air Base. You can scroll around in reconnais-



sance view the same way you can in radar view, although it will take you much longer to cover the same amount of territory.

## 9. Unpause the game

Scroll around in the radar view and reconnaissance view maps until you feel comfortable with them. When you are ready, click on the disk icon and unpause the game. Set the game speed as slow as you like for your first time.

On the radar view map, you can see the German planes lifting off from their air base and heading north toward your position. You want to get your own planes up in the air as quickly as possible, both to defend your own airspace and to launch attacks on the German installations.

## 10. Select one of your units to command

You can't give a command to any unit, stationary or mobile, until you have selected it. A unit is selected if its name and current data appear in the middle rectangular box at the bottom of the screen, called the **Current Unit Data Display** box. At the moment, Stavanger Base should be showing in this box. If it isn't, go to reconnaissance view of Stavanger and click on the cluster of buildings you see, and the correct information should appear in the box. Stavanger base is now selected. (There is another way to select units, which will be covered in the main manual.)

## 11. Attack your enemy's ground installations with bombers

Click on the current unit box, and the **Unit Command Screen** will appear. The top of the screen has a picture of your air base, while the bottom has information about the installation on the right and command options on the left. This screen will have different options on it depending on the capabilities of the selected unit; mobile units (that is, squadrons) will always have more command options than stationary installations.

Click on "Select Squadron." A list of the squadrons stationed at Stavanger will appear. Click on one of the two Blenheim MkIV squadrons. The unit command screen will reappear, but with the statistics and command options for the Blenheim squadron instead of the air base itself displayed. The status line of the planes indicates that they are mothballed; to activate them, click on the **Activate** command option, and the status line should change from "Mothballed" to "In Use". Although we've shown you how to use this command here, in general you won't need to manually activate your squadrons, because they will be automatically activated when you give them their first attack command.

Click on the **Ground Strike** command. A radar view display will appear. Use this to select a target for your plane to attack. Move the pointer to the south; the screen will automatically scroll to follow. Find the white dot of the Aalborg Air Base in Denmark





and position the pointer over it. The pointer marker will change colors when you have "locked on" to the target, and the target's name and country will be displayed. Click to confirm that target.

You will be returned to the unit command screen. On the right half of the command section, click on the words **Auto Launch**. When this option is on, your Blenheim MkIV will, after completing its ground strike on Aalborg, return to base, refuel, and immediately launch again for another strike without requiring a second order (unless, of course, it gets shot down at some point.)

Right click until you get back to the radar view map. You should see your Blenheim MkIV lifting off from Stavanger as a blue and gray vertical line.

Select Stavanger Air Base a second time and repeat the above directions with your second squadron of Blenheim MkIVs. Use auto-launch again to keep them attacking indefinitely.

## **12. Defend your airspace with interceptors**

By now, the German aircraft are probably nearing your air base. To defend your base, select Stavanger, and activate a squadron of Spitfires. Click on **Patrol**, and one of your Spitfires ( a red and yellow line on the radar view) will take off and go on patrol. It will automatically lock onto and try to intercept any German planes that get close to it.

You should now be putting up a reasonable fight against the Germans. For more details on game play, consult the main manual text.

# **AFC: WWII Player's Manual**

## ***Summary of Game Play***

*Air Force Commander: World War II* begins when you select a scenario to play. A briefing map appears, followed by the main control panel. From the main control panel, you will activate the squadrons of fighters and bombers from your air bases, select military and/or civilian targets in enemy territory, assign bombers to targets and determine their attack method, send fighters along with the bombers to provide air cover, and send other fighters on defensive patrol around your air bases and radar outposts to intercept enemy attackers.

You will also have to: keep track of damage done to your own units and decide



when you can afford to repair them; maintain the efficiency of your pilots by rotating squadrons off-duty when they get exhausted; and try to defend civilian targets to keep the unrest in your country's population low and to maintain the confidence of your country's press. You will have to make tough decisions about which enemy targets to concentrate your attack on, which of your own installations are most critical and must be defended, and where to make best use of your limited resources.

On your shoulders could rest the outcome of the entire war. Don't let your country down!

## *The Scenario Screen*

The first screen you will see when you start playing is the scenario choice menu. *AFC: WWII* comes with fourteen distinct scenarios, each of which may be played from either side of the conflict. The scenarios are listed in Appendix A. Some scenarios are recreations of famous air battles of World War II, while others are "what if" imaginary constructs.

The first column on the scenario screen shows the country whose forces you are commanding, and her allies, if any. The second column shows your opponent, and his allies. The difficulty of each scenario is an indication of how hard that scenario is to win, while the complexity rating gives you an idea of how many different elements are involved in each scenario. Both these ratings are on a scale of one to nine, with nine being the hardest or most complex. The difficulty of a scenario may change depending on which side of the conflict you are commanding, but the complexity remains the same.

Use the up and down arrows to page through the scenarios until you find the one you want to play, then left click on "OK".

## *The Briefing Map*

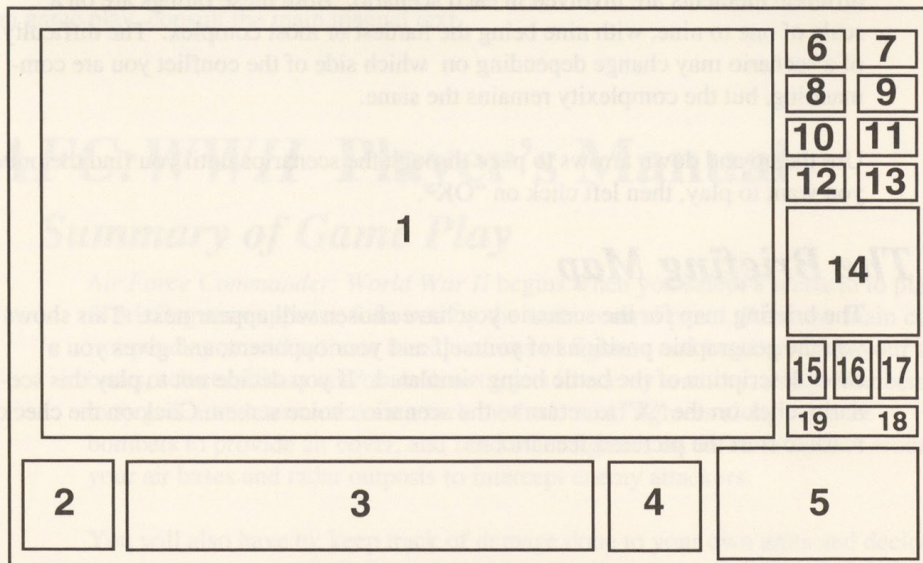
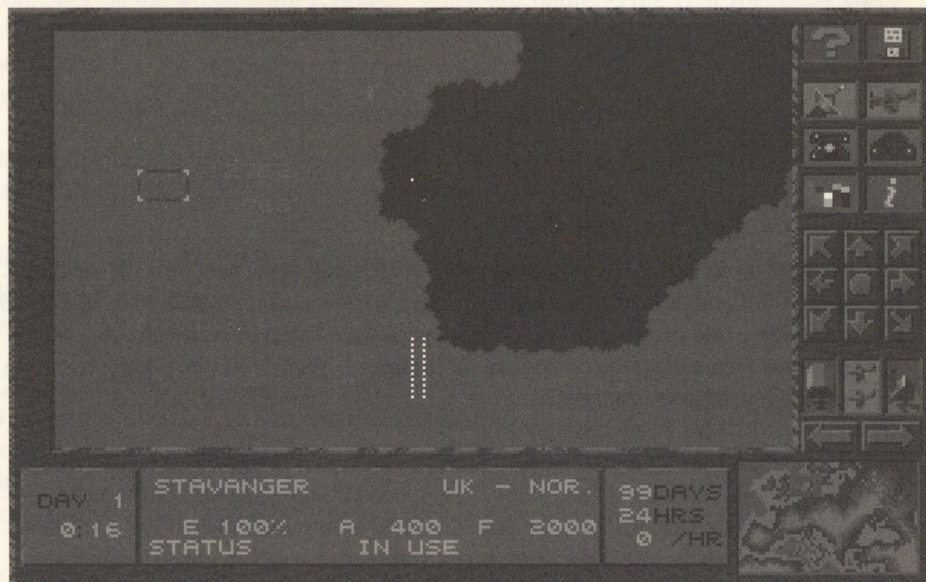
The briefing map for the scenario you have chosen will appear next. This shows you the geographic positions of yourself and your opponent, and gives you a short description of the battle being simulated. If you decide not to play this scenario, click on the "X" to return to the scenario choice screen. Click on the check mark to start the pictured scenario.





## The Main Control Panel

This is the screen from which you will manage all but a few aspects of the game.





1. Information map
2. Elapsed time
3. Current unit data display
4. Time until resources run out
5. Long range map of play area
6. Help command (Question-mark icon)
7. File management and game options (Disk icon)
8. Long range radar coverage map (Radar dish icon)
9. Long range unit concentrations map (Plane icon)
10. Communications screen (Telephone icon)
11. Media opinion screen (Radio icon)
12. Resource management screen (Bar chart icon)
13. Show briefing map ("i" icon)
14. Map scrolling and homing icons
15. Select air base as current unit (hangar icon)
16. Select squadron as current unit (planes icon)
17. Select military/civilian emplacement as current unit (building)
18. Go to next unit of selected type
19. Go to previous unit of selected type

### **1. Information Map**

This is the most important section of the main control panel. This part of the screen shows you your own installations and the enemy targets on either midrange radar view or short range reconnaissance view. From here, you can select and command your own units, or target enemy units for attack. You can also access the long range strategic map from this section of the panel.

This map starts out showing you the midrange radar view of your territory, which is the most useful of the three views. In general, left clicking in this section moves your viewpoint in closer to your target while right clicking takes you further away. See the section "The Three Map Views", below, for the details of the uses of each of the three maps.

### **2. Elapsed time**

This box shows you how much time has elapsed, in game days, hours, and minutes, since you began the scenario. The longer it takes you to defeat the enemy, the more likely it is that public opinion will turn against the conflict.





### **3. Current unit data display**

This box shows you which unit is considered your “current” unit. Your current unit is the only unit you can give orders to, so it’s important to keep an eye on this box. Different information is displayed here for different types of units; see the section “The Three Unit Types” for details. Left click in this box to issue orders to the current unit (See below.) Right click on this box to center the map view on the location of the unit in the box.

### **4. Time until resources run out**

This box tells you how long you can continue to operate if you keep using your resources at your current rate. At the top is the time you have left in game days and hours before your country will run out of supplies, forcing you to abandon the war effort. The amount of resources lost per hour is shown at the bottom. This number is the difference between the amount of resources being produced by your country and the amount the war effort is using up, not the total amount of resources used up per hour. (See the section on “Resource Management”, below.) If there is a net gain of resources instead of a loss, the usage rate will be shown as zero per hour and the time to zero will be shown as 99 days, 24 hours (the maximum time the clock can show.)

### **5. Long range map of play area**

This box shows you a miniature version of the long range strategic map. (See “The Three Map Views”, below.) By clicking anywhere on this map, you shift your radar view to that section. If you have no radar coverage of the selected area, however, all you will see is the green interference pattern.

### **6. Help command (Question-mark icon)**

*Air Force Commander: World War II* has a built-in help function to assist you in finding your way around on the main control panel. To use this function, click on the question mark and then move the mouse pointer over any section of the main control panel. Information about that section will appear on in the information map window.

### **7. File management and game options (Disk icon)**

Click on this icon to save your game, restore a saved game, or set your game options. See “Saving and Restoring Your Game” and “Setting the Game Options”, below, for details.

### **8. Long range radar coverage map (Radar dish icon)**

Click on this icon to see how much of the long range strategic map is covered by



your radar or by your enemy's radar. Left clicking while on this screen will toggle the display between your radar and your opponent's; right clicking returns you to the main control panel.

## **9. Long range unit concentrations map (Plane icon)**

Click on this icon to see the unit concentrations of yourself and your enemy on the long range strategic map. Units in the air appear as short orange bars, while units on the ground appear as short red and orange bars. Left clicking while on this screen will toggle the display between your own unit concentrations and those of your opponent; right clicking returns you to the main control panel.

## **10. Communications screen (Telephone icon)**

Click on this icon to see information about how well your forces are doing, and how high the unrest in your country is. (See "Population Unrest and Media Opinion" below for more about unrest.) This screen will tell you how many combat planes you have left, how many have been lost, how many enemy planes have been shot down, the average efficiency of all your units, the percent unrest in your country, and the overall outlook for the war effort. Once the battle is joined, this screen will provide you with bulletins of significant events: planes shot down, targets bombed, and so forth. Bulletins in green indicate a successful attack by you on your opponent, while bulletins in red are attacks your enemy scored on you.

## **11. Media opinion screen (Radio icon)**

Click on this icon to keep track of the media opinion about the conflict in your home country. This screen will tell you the percentage of the media that is for and against the war effort, both in your country and in your opponent's country.

## **12. Resource management screen (Bar chart icon)**

Click on this icon to see the figures on your resource usage. This screen tells you your total resources, hours elapsed, resources in per hour, resources out per hour, the net hourly loss or gain, and the estimated zero time when your resources will be exhausted.

## **13. Show briefing map ("i" icon)**

Click on this icon to see the briefing map for the scenario.

## **14. Map scrolling and homing icons**

Click on any of these eight arrow icons to scroll your information map in the direction of the arrow until you reach the edge of the map. Clicking on the solid





circle in the center of the arrows will cause your information map view to jump instantly to whichever unit is your current one (i.e. displayed in the “Current unit data display” box.)

**15. Select air base as current unit (hangar icon)**

Click on this icon to set your current unit type to “air base”. (See “The Three Unit Types”, below.)

**16. Select squadron as current unit (planes icon)**

Click on this icon to set your current unit type to “squadron”. (See “The Three Unit Types”, below.)

**17. Select military/civilian emplacement as current unit (building)**

Click on this icon to set your current unit type to “military/civilian emplacement”. (See “The Three Unit Types”, below.)

**18. Go to next unit of selected type**

Click on this arrow to make the next unit of the selected type into your current unit.

**19. Go to previous unit of selected type**

Click on this arrow to make the previous unit of the selected type into your current unit.

## ***Saving and Restoring Your Game***

To save a game or restore a loaded game, click on the disk icon on the main control panel and select one of the two following menu options.

**Save game to disk**

Clicking on this option gets you a numbered list of eight slots. Select a slot to save your game and click on the box. Your game will be saved in that slot and you will be returned to the main control panel to continue playing, if you wish. The next time you return to the save menu, the box will be filled in. If you click on a filled slot, the computer will overwrite your old game, so be careful if you have a game you don't want to lose.

**Load game from disk**

Clicking on this option brings up the saved file menu. Select a saved game by clicking on the filled box, and the computer will load it and take you immediately into the main control panel to continue playing.



## *Setting the Game Options*

Clicking on the disk icon on the main control panel allows you to set several game options as well as save and load games.

### **Restart this scenario**

Your current game will end and the scenario will return to its starting conditions.

### **Select new scenario**

This option ends your current scenario and takes you to the scenario choice screen.

### **Pause this game**

Stops the current game temporarily. You may do everything except give commands to your units while your game is paused. If you issue a command to any unit, your game is automatically unpaused. You may also unpause the game manually by returning to this screen and clicking on this choice again.

### **Game speed**

You can play *AFC: WWII* on any of five speeds: crawl, very slow, slow, normal, and fast. Click on the game speed you want; you will be instantly returned to your game in progress, with the new game speed. You may change your game speed during a game as many times as you like.

### **Scroll speed**

Use this option to set the rate at which your maps scroll across your screen. You have the same five options as for game speed: crawl, very slow, slow, normal, and fast.

## *The Three Map Views*

There are three different views of the conflict available to you in *AFC: WWII*: the long range strategic map, the midrange radar view map, and the short range reconnaissance view map.

### **The long range strategic map**

To access this map, right click in the information map window when it is showing the radar view. The strategic map of Europe will appear, filling the entire screen, overlaid with a letter/number grid. The mouse pointer will appear as a





rectangular box. To move to a map location quickly, position the box over the area you want to view, and click any mouse key. You will be returned to the main control panel with the radar view of the selected area on the information map. If you have no radar coverage of that area, you will see only green interference on your radar view.

### **The midrange radar view map**

This is the most useful and versatile of the three maps, and the one you will probably spend the most time using. It represents the territory which is visible on your radar; therefore, it may change during the game if you allow your radar stations to be destroyed or if you send up pathfinder planes (assuming you have them) to increase your coverage. Any area on this map which is not under your current radar coverage appears as moving green interference.

The following table explains what map symbol corresponds to what object on the radar view map.

Object	Map Symbol
<u>Non-Targetable</u>	
<i>General Terrain Features:</i>	
Land area	Black regions
Sea area	Blue regions
Roads	Green lines
Territorial Borders	Orange lines
Cities	Green circles
<u>Targetable</u>	
<i>Stationary Units:</i>	
Air bases	White dots
Military emplacements	Orange dots
Civilian emplacements	Blue dots
<i>Mobile Units:</i>	
Enemy planes, all types	Red and white vertical lines
Friendly planes	
Interceptors	Red and yellow vertical lines
Strike aircraft	Blue and gray vertical lines
Ground attack craft	Green and yellow vertical lines
Long-range bombers	Red and blue vertical lines
Pathfindercraft	Blue and green vertical lines



Non-targetable objects on the map can't be attacked with your aircraft; only objects represented by dots or colored lines are allowed targets. The blue plus sign with the word "zone" below which can be seen in places on the radar map is a centering marker which appears in the middle of the area contained in one grid square on the long range strategic map. When a bomber makes a strike, an orange dot will briefly appear, and then disappear.

The mouse pointer on this map appears as a rectangular box with X and Y coordinates showing the box's position on the long range strategic map. The (0,0) point is the upper left hand corner of the entire playing area. Left clicking on this map takes you to a close-up reconnaissance view of the area within the borders of the rectangular box. To get a close-up of a moving squadron, position the box over the bottom of the vertical line; that's where the plane will be on the reconnaissance view. The height of the vertical line indicates the altitude of the plane.

### **The short range reconnaissance view map**

On this map, you can actually see squadrons and installations as pictures and not just symbols. You can watch your interceptors getting into dogfights with the enemy pilots, and see installations being bombed. Land appears green, water is blue, and roads are black. Your mouse pointer appears as a blue rectangle containing a set of crosshairs and the words "SAT ENH".

Each type of plane and installation appears as a different picture. To find out what a particular picture represents, position the crosshairs over it and left click. That unit will become your current unit, and the information for that installation will appear in the current unit data display box. You may also click on enemy installations and get useful information about their current efficiency and other statistics by selecting them in this way, but you can't give them orders, of course. To get information about a city, center the crosshairs on the lake near the middle of the picture and click.

If you fail to center the crosshairs on a target properly, the pointer box will flash to let you know that you missed. This is most likely to happen if you are trying to click on a moving squadron with the game set on one of the faster speeds. When the pointer flashes, the game also briefly slows down the scroll speed on the screen to let you more easily click on your target.

Right clicking on this screen returns you to the long range radar view map. It is possible to get a reconnaissance view of areas that are not covered by radar; you





can left click on any area of interference and get a reconnaissance view of what that area looks like. The area covered is so small, however, that finding anything useful this way is difficult. However, if your opponent succeeds in knocking out all or part of your radar coverage, this may be the only method you have for targeting his installations.

## ***The Three Unit Types***

There are three distinct types of units in *AFC: WWII*, each with its own abilities and uses.

### **Air bases**

Air bases are represented by white dots on the radar view screen, and appear as a cluster of buildings with runways on the reconnaissance view. Each air base has a number of squadrons of planes stationed at it, and those squadrons will always launch from that base and return to it when a mission is completed for refuel and repair.

The current unit data display for air bases shows you the following information:

*Name*: The name of the air base.

*Country*: Which country the air base belongs to.

*Efficiency (E)*: The percent efficiency of the air base. (See below.)

*Ammunition (A)*: How much ammunition is stored at the air base.

*Fuel (F)*: How much airplane fuel is stored at the air base.

*Status*: What the status of the air base is.

Air bases are crucial to your war effort, and should be defended. Without air bases, you can't launch planes, and defeat is guaranteed. Each time a plane launches from an air base, the base's supply of ammunition and fuel is decreased; when either of them drops too low, launches become impossible. Unless there is a fuel dump or munitions factory nearby, a base's stores are never replenished, so it's a good idea to keep an eye on them as you play.

### **Squadrons**

Your squadrons are your only mobile units, and as such are responsible for all attacks and nearly all defense. Planes appear as colored vertical lines; the color of the lines varies depending on the type of plane, and the height of the line indicates the plane's altitude. All enemy planes appear as red and white lines, regardless of type; to see what type of plane has been launched against you, go to reconnaissance view and select the enemy plane.



The current unit data display for squadrons shows you the following information:

*Name:* The type of plane in the squadron.

*Base:* Which base the plane launches from.

*Planes remaining (P):* Tells you how many planes in that squadron are still flying. For example, if the display says "P 3-5", there are three planes of the original five still able to fly.

*Efficiency (E):* The percent efficiency of the squadron. (See below.)

*Fuel (F):* How much fuel the plane has left. When a plane gets low on fuel, it will be forced to abort its current mission and return to its air base for refueling.

*Status:* States what mission the plane is currently pursuing. The status line automatically updates if the plane's status changes (if a patrolling plane goes on intercept, or if it aborts due to lack of fuel, for example.)

### **Military and Civil Emplacements**

Military emplacements (radar stations and anti-aircraft batteries) appear as orange dots; civil emplacements (hospitals, dockyards, ammunition dumps, and so on) appear as blue dots. Your radar stations are crucial to your war effort; without them, gathering targeting information becomes much more difficult. Anti-aircraft batteries are sometime set up to help defend these important emplacements; they will automatically shoot at any enemy plane that comes into range, but won't necessarily succeed in stopping it.

Civil emplacements are less crucial to your strategy, but are still important, for two reasons: first, if you allow many important civil functions to be destroyed, the unrest in your population will increase drastically, possibly forcing your withdrawal and defeat; and second, some civil emplacements are very useful to your war effort, such as ammunition and fuel dumps, without which your air bases can't be resupplied.

The current unit data display for military and civil emplacements shows you the following information:

*Name:* The type of installation.

*Country:* Which country the installation belongs to.

*Efficiency (E):* The unit's efficiency. (See below.)

*Status:* The unit's status.





If a city is selected, the box will also display information about the level of unrest present in the city, the percentage of the city that has power (P), water (W), and food (F), the amount of structural damage to the city (D), and any special conditions that also pertain, such as food rationing.

## *Selecting Units*

In order to issue a command to one of your units, you must first select it as current. (You can only issue commands to one unit at a time.) There are three ways to make a unit your current unit.

First, you can use the reconnaissance view to select a unit. On the radar view map, position the pointer box over the unit you want to command, and left click to bring up the reconnaissance view. Left click again on the picture of the unit, and it will become your current unit.

Second, you can use your unit selection keys (the hanger, planes, and factory icons, plus the next/previous arrows). Click on the type of unit you want to command, then use the arrow keys to page through the list of units of that type until you find the one you want. To locate that unit on the map, click on the home button (the solid circle in the center of the scrolling arrows), or right click on the current unit data display box, and the map will center on that unit.

Third, units may be selected through the command screen, as described in the next section.

## *Commanding Units*

If you are on the main control panel, left click on the current unit data display box bring up the command screen for that unit so that you can give it orders.

### The unit command screen

The top of this screen shows a picture of your planes heading out on their missions. The bottom half of the screen is divided into two sections. On the left are shown your main command options, while the right half tells you the unit name and status, lets you access data on the unit, allows you to page through all the units of that type that you have, and lets you set the auto launch command option. The list of command options will differ between the three different types of units, and between different types of planes as well — not every squadron will have every possible squadron command. To select a command option, left click on it.



## *Commands for any unit:*

Activation: Toggles the unit's status between "Mothballed" (not using resources) and "In Use". An "In Use" squadron is active but not assigned to any mission. In general, you won't need to use this command much for your squadrons as they will be automatically activated when you give them their first mission command; this command will mostly be of use to you for shutting down or reactivating your ground installations.

Repair: Toggles the unit into and out of repair mode. (See below.)

Data: Tells you the unit's current efficiency and what it costs in resources to keep it active at its current level. For squadrons, this also tells you the squadron's suitability for various types of attacks, with a zero being not suitable and a nine being exceptionally well suited.

Prev/Next: Use these commands to page through all the units you have that are the same type as the one currently showing.

## *Commands for air bases only:*

Select Squadron: This command brings up a list of the squadrons stationed at the air base and their current assignments. Click on a squadron to access the command screen for it.

## *Commands for squadrons only:*

Altitude Drop, Ground Strike, and Armor Strike: These three commands send bombers after targets in enemy territory. An *altitude drop* does less damage but keeps your planes above the level of enemy anti-aircraft fire; a *ground strike* is a low-level drop against unarmored targets; and an *armor strike* is a low-level strike against heavily armored targets such as anti-aircraft batteries. After selecting one of these commands, the radar view screen will appear in order to allow you to select your target. The map will scroll as you move the mouse pointer. Position the pointer over your desired target and watch for it to change color to indicate a solid lock, then left click. It is entirely possible to accidentally bomb your own installations, so be careful! If you can't see a target because you've lost radar coverage of that area, you can still bomb it if you have some idea where it is; move the mouse pointer over the area, and if it changes color, you've achieved a lock and can bomb.

Patrol, Intercept, and Flight Path: These commands send fighters up to go directly after enemy planes. A fighter sent on *patrol* will fly over your territory in a circular pattern, looking for enemy aircraft. When it spots one, it will head off to intercept it, and the plane's status line will change to reflect this. If





you direct a fighter to *intercept*, you will be asked to target a specific plane in the same way you would target a bomber run, and your fighter will head straight for that enemy, ignoring any others. Selecting *Flight Path* allows you to define a patrol route for your plane to follow. You will be shown the radar view map; click the left mouse button up to six times to set a flight path for your fighter. Click the right mouse button to finish. Your fighter will lift off and fly the path you've set; if he sees any enemy planes while on that path, he will break off to intercept. You can also use this command to send a pathfinder plane out to get a radar view of an uncovered area.

**Air Cover:** The air cover command directs a fighter plane to fly with another plane (usually a bomber) in order to try to intercept any enemy planes which might come close to it. When you send a plane on air cover, you will be presented with a list of squadrons at that base; click on the squadron for which you want your plane to provide air cover.

**Abort Mission:** Clicking this command option ends the squadron's current mission and tells it to return to base.

**Transfer Base:** If you have several air bases, you may find it useful to be able to move squadrons of planes between them, in order to bring them closer to the front so they use less fuel on their missions, for example. After selecting this command, you will be shown the radar view map and asked to select the base to transfer that squadron to. Position the mouse pointer over the base of your choice and left click. That squadron will take off from its current base and fly to its new home base.

**Circular Sweep:** This command tells a pathfinder plane to launch and perform a circular sweep around its home base.

**Auto-Launch:** Clicking on this command toggles the auto-launch function on or off. When a squadron is placed on auto-launch, it will complete its mission (assuming it isn't shot down), return to its base, refuel and launch again on that same mission without further commands from you. If you disable this option, the plane will return to base and stay there, doing nothing, until you give it a fresh set of orders. This makes auto-launch a very useful feature, but be careful; if your resources are limited, keeping all your squadrons on auto-launch will use up your supplies at a very high rate. Auto-launch also causes squadrons to fatigue quickly and reduces their efficiency. Not all types of missions can be placed on auto-launch.



### Squadrons and Planes

When you give a command to a squadron, you have sent *one* plane of that squadron on that mission. You can only send one plane of a squadron on a mission at a time. Each squadron has a set number of planes, although different types of aircraft have different numbers of planes per squadron. A squadron can fly as long as it still has one plane remaining, but if that last plane is lost, the squadron has been destroyed and is taken off the roster of available units.

## *Unit Efficiency and Resource Management*

The game concepts of unit efficiency and resource management are closely interlinked. A damaged or fatigued unit's efficiency can be restored, but the cost in resources may prohibit you from keeping all your units in top-flight condition.

### Efficiency

A unit's efficiency drops from damage taken due to enemy strikes, in the case of air bases and military and civil emplacements, or from fatigue due to overuse in the case of squadrons.

When a squadron's efficiency drops too low, it will start to lose more dogfights and perform poorly on bombing runs. In contrast, the reduction of a ground installation's efficiency has no effect on that installation until the efficiency drops to zero, at which time the installation is completely destroyed and vanishes from the map. A destroyed ground installation can never be replaced, so it is worth your while to keep an eye on the condition of your ground installations.

To restore the efficiency of a unit, go into the unit's command screen and put it in repair mode. This will cause the unit's efficiency to improve gradually; but, while it is in repair mode, it will use twice the normal amount of resources. You may have to prioritize which installations get repaired if your resources are running low.

### Resources

In some scenarios, your country may be well-off and have nearly limitless resources. In others, supplies may be desperately short. It is important to know which position you start in, in order to plan your resource consumption. When your level of resources hits zero, ground installations will automatically start to close down, and defeat will follow very quickly.





Active units use up resources; units under repair use up twice the amount they normally do. To see how quickly you are using up your resources, keep any eye on the "Time until resources run out" box on the main control panel. For more detailed information, click on the bar graph icon. If you are using far more resources than you are taking in, and if your country does not have a large stockpile available, you will have to make hard decisions about which installations get repaired, and whether you can afford to keep all of your available planes in the air.

## *Population Unrest and Media Opinion*

If you allow too many important civil emplacements to be destroyed, such as hospitals, power stations, and food depots, the unrest in your cities will grow. Each time the unrest level rises by ten percent, the game will flash a message telling you what the current unrest level is. If this level reaches 40% of the population, you will be forced to withdraw from the war, costing you the game. If the unrest level in your country is rising, you may want to start putting more effort into defending civilian targets such as power, food, and water supplies, as well as hospitals. You can learn your country's current unrest level from the communications screen (telephone icon).

Similarly, if the conflict drags on too long without progress, media opinion may turn against the war, forcing a political pullout. You can learn about current political opinion in your country by bringing up the media opinion screen (radio icon). This screen will also show you the critical disapproval level at which your pullout will be demanded.

These same forces also have an effect on your country's allies, if there are any. If either unrest or disapproval levels get unacceptably high in an allied country, that country's forces will be withdrawn from the conflict. While the loss of an ally's forces can be damaging to your overall strategy, it is important to remember that only in your home country will public unrest and media antagonism automatically result in your defeat if unchecked. It is also important to note that media opinion does not have equal strength in every country; the press will be most influential in countries where it is free, and less so in areas where it is under the control of the government.



## *Strategy Hints and Tips*

- While it is possible to win AFC:WWII by intercepting each individual enemy attack as it happens, it is a very inefficient strategy. It is usually a better idea to come up with a broad overall strategic plan and follow it than to simply respond to enemy attacks as they occur.
- Remember to watch your resource use, particularly if you start out with very little in the way of supplies, and to keep an eye on population unrest and media opinion. It is entirely possible to lose a game you thought you had nearly won by running out of resources at the last minute, or by being forced to withdraw for other reasons.
- Watch the efficiency ratings of your squadrons and critical installations such as air bases and radar stations. A ground installation that reaches zero efficiency is destroyed; a squadron that reaches zero efficiency is not destroyed, but it is useless in combat until it has been rested. A squadron is only destroyed when all of the planes in it are destroyed.
- Be careful of sending your planes to very distant locations, as they may not have the fuel to reach their targets. A plane that runs out of fuel doesn't crash, but it is forced to abort its mission without accomplishing anything and immediately return to base, which is a waste of resources.
- If a lot of your squadrons are running out of fuel on their way to their targets, consider transferring them to bases closer to the action.
- An air base often has more than one of the same type of squadron, and it's easy to become confused when issuing orders. Be careful.
- If you are paging through your squadrons from the command screen using the Prev and Next options, you will run through all of your squadrons, not just the ones at the air base from which you started. This can be very confusing when you have a large number of air bases, so use caution.
- Different types of squadrons have different capabilities. You can't assign a squadron to a task for which it is completely unsuited — the game won't allow it — but you can assign them to jobs that are not their best areas. Consult Appendix B for a listing of the squadron types used in this game.





and their general abilities, and check their data entries to get better information about what missions your squadrons are best equipped for before you give them orders.

➤ Combat between aircraft is resolved automatically by the computer based on the relative combat ratings and efficiencies of the planes, combined with a small random element.

➤ Targeting for bombing runs is automatic once you have clicked on the installation to be attacked and the targeting order has been acknowledged; the success of the mission does not depend on how accurately you line up the targeting box. If you fail to place the targeting box over an acceptable target, you will get the message "Target not acquired" and should try again.



## Appendix A: Scenario List for AFC: WWII

<b>Ally, Axis</b>	<b>Allied Forces</b>	<b>Axis Forces</b>	<b>Difficulty Ally, Axis</b>	<b>Complexity</b>
0,1	UK in Norway	German in Denmark	5, 4	1
2, 3	Poland	Germany	8, 2	3
4, 5	Britain	Germany [Germany in France]	7, 5	5
6,7	Hungary [Bulgaria]	Romania [Yugoslavia]	6, 5	4
8,9	France [Yugoslavia]	Italy [Spain]	4, 6	4
10,11	Poland [Britain] [France]	Germany [USSR]	7, 5	7
12,13	Britain [France] [USA in the UK]	Germany [Italy]	5, 7	7
14,15	France [USSR] [Poland]	Britain [Germany] [Italy]	8, 6	8
16, 17	USSR [USSR in Poland]	Germany [Germany in Poland] [Romania] [Hungary]	7, 4	6
18, 19	Britain [USA in the UK]	Germany [Germany in France] [Germany in Denmark] [Germany in Norway] [Italy]	5, 5	7





## Appendix A: Scenario List for *AFC: WWII*

<b>Ally, Axis</b>	<b>Allied Forces</b>	<b>Axis Forces</b>	<b>Difficulty Ally, Axis</b>	<b>Complexity</b>
20, 21	Britain [USA in the UK] [France] [USSR] [USSR in Poland] [USA in Italy]	Germany [Germany in Poland]	4, 8	8
22, 23	USA in Italy	Bulgaria [Hungary] [Romania]	6, 8	3
24, 25	Britain [USA in the UK] [France] [Yugoslavia] [UK in Norway]	Germany [Italy] [USSR] [Hungary] [Romania] [Spain]	9, 8	8
26, 27	Britain [USA in the UK] [USSR] [USSR in Poland]	Germany [Germany in France] [Italy] [Germany in Poland] [Hungary] [Germany in Norway]	7, 8	9



## Appendix B: Mobile Units in AFC: WWII

### Mobile Units in *Air Force Commander: World War II*

<b>Spitfire MKI</b>	fighter	<b>MiG 3</b>	fighter
<b>Hurricane MKI</b>	fighter-bomber	<b>Yak 9</b>	fighter
<b>Mosquito Dh.98</b>	fighter-bomber	<b>La 5FN</b>	fighter
<b>Blenheim MkIV</b>	light bomber	<b>Il 2m3</b>	fighter-bomber
<b>Wellington MkIII</b>	medium bomber	<b>Pe 2FT</b>	lighter bomber
<b>Lancaster MkII</b>	heavy bomber	<b>Pe 8</b>	medium bomber
<b>Me 109E</b>	fighter	<b>MS.406</b>	fighter
<b>Fw 190A</b>	fighter-bomber	<b>Curtiss Hawk</b>	fighter
<b>Bf110</b>	fighter bomber	<b>D.520</b>	fighter
<b>Ju 87 Stuka</b>	light bomber	<b>Potez 630</b>	fighterbomber
<b>Ju 88</b>	light bomber	<b>CR.42</b>	fighter
<b>Do 17</b>	medium bomber	<b>Folgore</b>	fighter
<b>He 111</b>	medium bomber	<b>Re 2005</b>	fighter
<b>Me 110 Nightfighter</b>	pathfinder	<b>S-79</b>	medium bomber
<b>Mustang</b>	fighter	<b>Alcione</b>	medium bomber
<b>Lightning</b>	fighter	<b>P.24</b>	fighter
<b>Thunderbolt</b>	fighter-bomber	<b>P.11</b>	fighter-bomber
<b>Mitchell</b>	medium bomber	<b>P.37B</b>	light bomber
<b>Flying Fortress</b>	heavy bomber	<b>P.23B</b>	medium bomber
<b>Liberator</b>	heavy bomber	<b>Ik-2</b>	fighter
<b>B-17 Pathfinder</b>	pathfinder	<b>Ik-3</b>	fighter
<b>I-16</b>	fighter	<b>IAR-80</b>	fighter





## The Battle of Britain

It was during the second World War that the use of aircraft in combat first became a crucial element in war strategy. Since that time, the importance of air power has continued to grow, until in modern days the outcome of an entire conflict often depends almost entirely on the nature and use of the participants' air forces. The single most famous air battle of WWII occurred in the skies over Britain, as the British Royal Air Force clashed repeatedly with the Luftwaffe, the fearsome air force of Adolf Hitler's Germany.

At the conclusion of his war time speech Winston Churchill spoke these words: "The battle of France is over...but the Battle of Britain is about to begin." By 1940, France, Belgium, Holland, Denmark, and Poland had all fallen to the Luftwaffe. Britain alone remained unconquered and able to offer defiance to the Germans. Hitler, anticipating further eastern conquests, hoped that Britain would accept German control of the continent and seek peace. Much to Germany's astonishment, however, Britain proved unwilling to give up without a fight. The island nation shunned the chancellor's overtures, leading to a massive Luftwaffe attack in August of 1940. Although German planes had been in Britain's skies before this point, this was easily the most savage and concentrated air attack the nation had yet seen.

Bombs rained down on British ports, airfields, and industrial centers, and finally on the capital city of London itself. The goal was to crush British morale and wipe out the RAF in preparation for the land invasion of England, codenamed Operation Sea Lion. Although outnumbered, the RAF pilots in their swift Spitfires fought off the Luftwaffe time after time. Finally, in October of 1940, Operation Sea Lion was postponed indefinitely. It was Germany's first major defeat of WWII.

There were several factors which contributed to the British victory. The British pilots had the defender's advantage of better access to bases for refueling and repair than their German counterparts, and were perhaps inspired by the knowledge that they were protecting their homeland. In addition, British Intelligence had broken the main German code, Enigma, early in the war, and were able to provide excellent information on German plans and movement. The key factor, however, was the invention of radar by Robert Watson Watt, a British researcher. The nation's radar net had been completed scant months before the Battle of Britain began. This new technology, called "Britain's Secret Shield", allowed the RAF to detect incoming German aircraft and intercept them before the bombers reached their targets. It also permitted the British to make the best possible use of their limited resources, sending the right number of planes in for each skirmish.

Between the impressive capabilities of the Spitfire and the farseeing eyes of the new radar technology, the RAF succeeded in frustrating Germany's plans for Britain and forged the first link in the chain of events leading to Germany's eventual defeat. For the first time in history, the fate of a nation depended on the outcome of a battle in the skies instead of on land or sea.



## The Aircraft of World War II

Supermarine **Spitfire**: This British fighter was the fastest military aeroplane in the world at the time it was first made, achieving a top speed of 342 mph. It was the star plane of the Battle of Britain.

Hawker **Hurricane**: This British fighter-bomber destroyed more enemy aircraft than the combined total of all of Britain's defense systems in the air or on the ground. One Hurricane achieved speeds of 408 mph with a helping tailwind.

Messerschmitt **Me 109E**: Also called the Bf 109, this plane is one of the most famous German aircraft ever built. Considered one of the best fighter planes of WWII, it was the mainstay of the German effort in the Battle of Britain.

Focke-Wulf **Fw 109A**: The Fw 109A was a better all-around aircraft than the Me 109E, able to both fight and bomb with equal effectiveness. It was remarkably strong and powerful for its small size.

North American P-51 **Mustang**: This American plane was the best long-range fighter of WWII, and a great all-around combat aircraft. It had several times the fuel capacity of other fighters of its size.

Boeing B-17 **Flying Fortress**: This American B-17 bomber was a heavily-armed aircraft, capable of carrying up to 17,600 lbs of bombs at a time — which accounts for its nickname, "Flying Fortress."

Yakovlev **Yak-9**: This long-range Russian fighter was the primary aircraft of the Battle of Stalingrad. A very versatile plane, the Yak-9 could be (and was) modified for use in almost every type of mission.

Petlyakov **Pe 2FT**: The Pe 2FT was one of the finest and most adaptable Russian aircraft, good at nearly everything.







# *Impressions*

*Committed to Excellence in Strategy Entertainment*

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