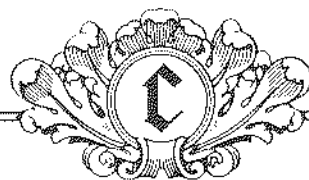


Red BaronTM

Part 3
Game Play
&
Appendix

Game Play



INTRODUCTION

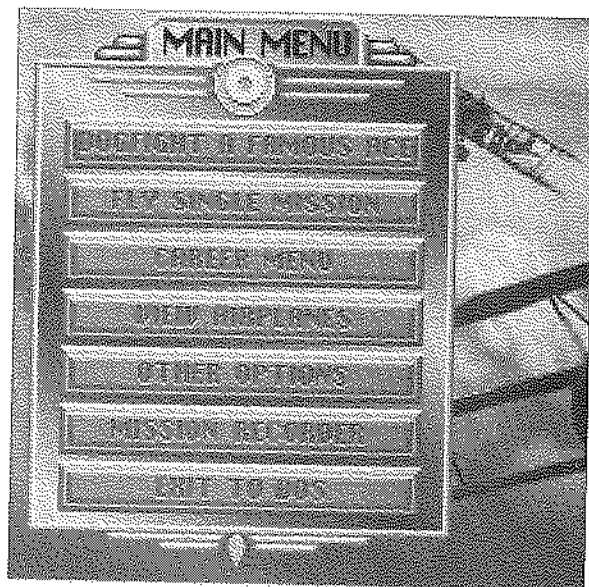
Red Baron is a historically accurate and detailed recreation of flight during the era that launched aerial combat, World War I. The controls available to the great Aces were few and primitive. However, as a computerized simulation Red Baron is capable of offering you controls unlike anything the Aces would have ever dreamed. This portion of the Red Baron manual outlines and describes these controls. It does not describe the elements of flight such as take-off and landing, maneuvers, or tactics. These elements are discussed in detail in previous chapters. Please refer to the table of contents for specific page references.

■ For installation instructions, see the Smart Start™ section on the Quick Reference card.

Following are the sections described in this chapter:

- Flight Controls
- View Commands
- Machine Gun Controls
- Time Compression
- Game Play Preferences
- Realism Panel
- Weather
- Your Flight Group
- Simulation Overview
- Fly Single Mission
- Fly Single Mission Conditions

- The Mission Assignment Screen
- The Flight Assignments Screen
- Navigation
- Ending the Mission
- Career Play
- Career Menu
- Aerodrome Menu
- Career Sequences
- The Mission Recorder



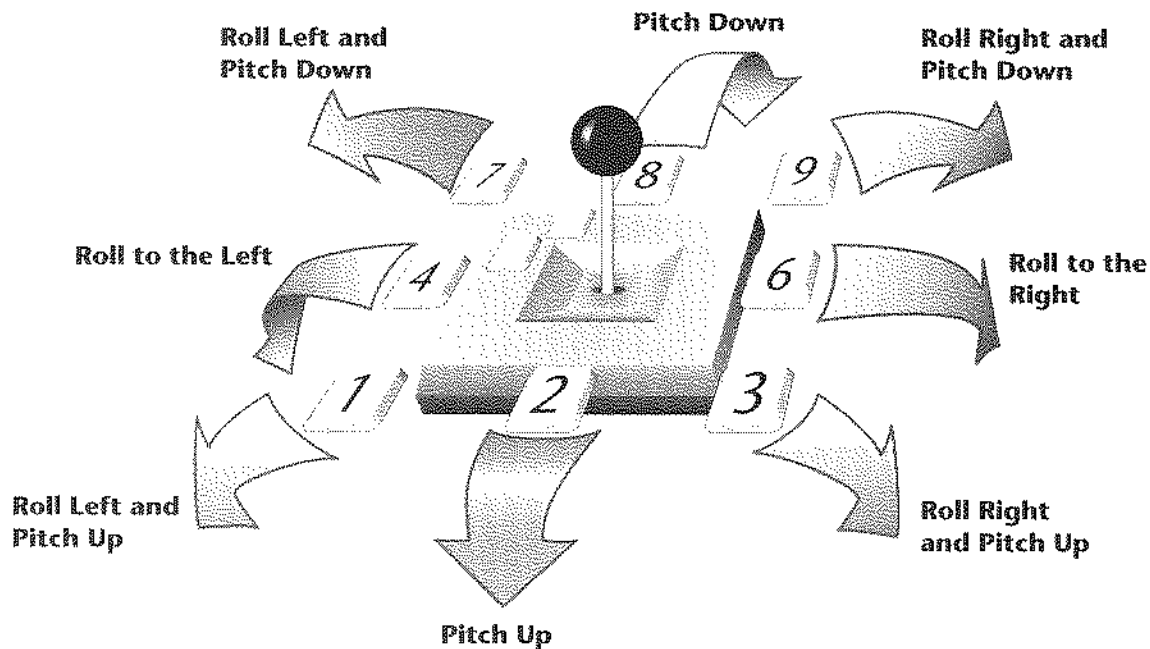
FLIGHT CONTROLS

Movement

You use the control surfaces and the throttle to maneuver your aircraft (for more detail see the Flight Section). These include the ailerons, the elevators, the rudder, and the throttle.

From the Preferences Panel (activated from the simulation by pressing **F10**), you may select which peripherals you have attached. You may select: keyboard, joystick and mouse control.

The mouse controls are identical to those of the joystick. For movement controls, the mouse is self-centering. This means that it will automatically recenter itself after each movement command.



FLIGHT CONTROLS

Rudder

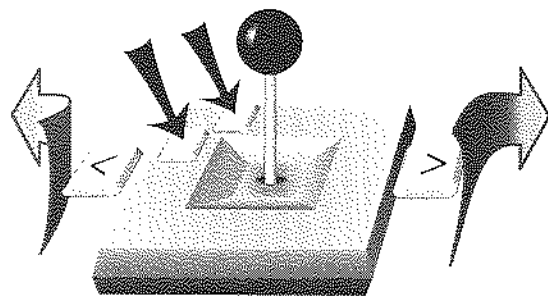
The rudders can be controlled from the keyboard at any time. They can also be controlled from the joystick or mouse *while in the cockpit view*.

Keyboard Rudder Controls

< left rudder
> right rudder

Joystick Rudder Controls

While in the cockpit view, you may control the rudder with the joystick or mouse by *pressing and holding* both buttons on the joystick or mouse. When both buttons are held down simultaneously, moving the joystick or mouse left and right will apply rudder in the corresponding direction. External views do not allow rudder control from the joystick or mouse. The keyboard must be used for external view rudder control.



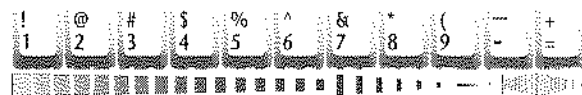
Hold both buttons & move joystick or mouse left or right to control rudder.

Throttle

The throttle can be controlled by mouse, joystick or keyboard.

Keyboard Throttle Controls

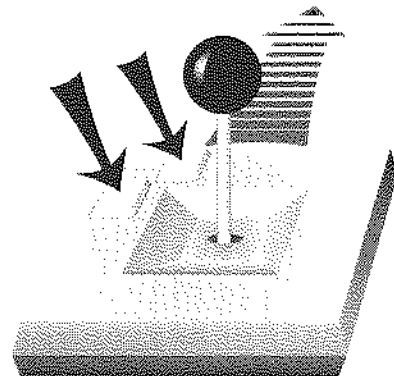
1..9 controls throttle.
1 = idle
9 = full throttle
+ increase throttle
- decrease throttle



■ NOTE: Airplanes with rotary engines had no throttle control. The power was always at full. The pilot could cut throttle with a blip-button, essentially cutting all power and giving the pilot an on/off speed control. If you wish to simulate this experience, use only the 1 and 9 keys to control throttle.

Joystick Throttle Controls

Within the cockpit you may control the throttle with the joystick by holding and pressing both buttons on the joystick. When both buttons are held down simultaneously, moving the joystick forward will increase throttle, and moving it backward will decrease it. This will not work if your view is outside the aircraft. The keyboard must be used for throttle control while in external views.

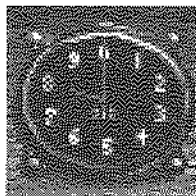


Hold both buttons & move joystick or mouse forward & backward to control throttle.

FLIGHT CONTROLS

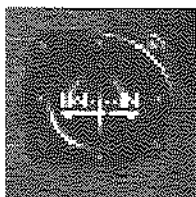
Instruments

■ From the Realism Panel, if you turn on Realistic Instruments the only instruments you will see will be the ones that existed on the original WWI aircraft.



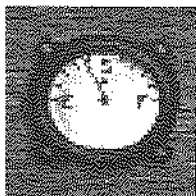
Altimeter

Indicates the altitude in feet. The large needle indicates 100s of feet, and the small needle indicates 1,000s of feet. It is set to 0 at ground level.



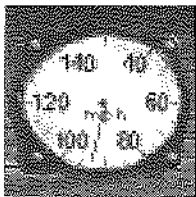
Compass

Indicates your current heading. The readings are N for North, S for South, E for East, and W for West. Also included are NW, NE, SW, and SE.



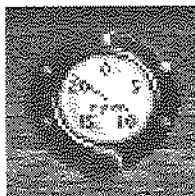
Fuel gauge

Indicates how much fuel you have left.



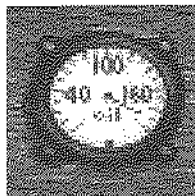
Air Speed Indicator

Indicates your current air speed in miles per hour (m.p.h.).



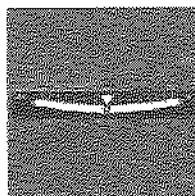
Tachometer

Indicates how many revolutions per minute the engine is making. The needle indicates r.p.m.s x 100. Generally, this corresponds to your current throttle setting.



Oil pressure gauge

Indicates your current oil pressure. If your airplane is damaged and has an oil leak, the needle will drop.



Inclinometer

Indicates the current bank of your aircraft. The instrument is simply a ball bearing inside a curved groove. If the ball is to the left of center, it means you have banked left. It's a crude ancestor of the artificial horizon equipped in aircraft today.

VIEW COMMANDS

While patrolling the front, you'll find it necessary to look around often to avoid being surprised. The best pilots of WWI were always looking around for enemy fighters.

Controlling View Commands with the Keyboard

Switching between cockpit and external view

Press the Return key.

From within your aircraft (cockpit views)

- F1 Look forward (your instrument panel will be visible)
- F2 Look back
- F3 Look left
- F4 Look right
- F5 Look up
- F6 Look down (lean out and look straight down)

From outside your aircraft (external views)

- F1 View the Front of your aircraft
- F2 View the Rear of your aircraft
- F3 View the Left Side of your aircraft
- F4 View the Right Side of your aircraft
- F5 View the Bottom of your aircraft (Look up at your plane from a lower altitude).
- F6 View the Top of your aircraft (Looks directly down at your plane from a higher altitude).

- F7 View from a Chase Plane (the view follows your aircraft in a chase plane). F7 works from within the cockpit and outside your aircraft.



Mouse controls for view commands are identical to those of the joystick.

Joystick	Mouse
Button #1	= Left Button
Button #2	= Right Button

Controlling View Commands with the Joystick

You may control the current view without touching the keyboard.

From within the Cockpit

Holding down **button #2** and moving the joystick forward will switch to Look Forward (F1), to the left will switch to Look Left (F3), etc. Pressing and releasing **button #2** with the joystick centered will switch from the cockpit to the outside rear view.

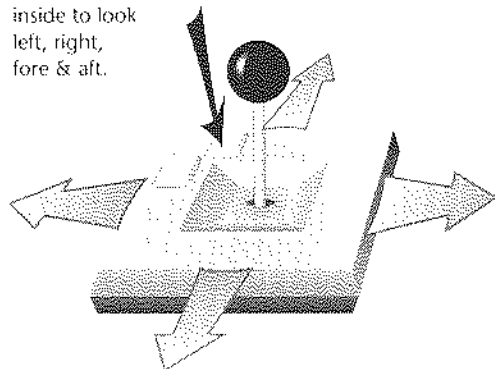
From outside the Aircraft

Holding down **button #2** while moving the joystick will pan the view smoothly around the aircraft: moving the joystick to the left will pan the view clockwise around your aircraft, moving the joystick forward will pan the view up around the aircraft, etc. Holding down both buttons while moving the joystick forward/backwards will move the camera closer to/away from the aircraft. Pressing and releasing **button #2** with no joystick movement will switch to the front cockpit view.

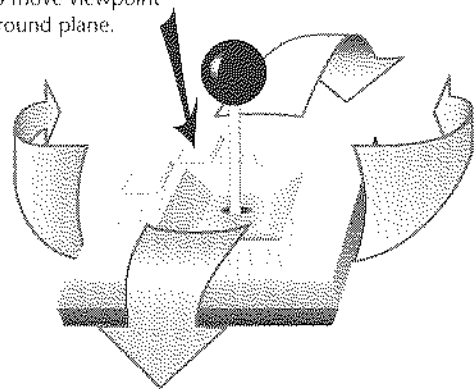
These commands may be duplicated without a joystick. The keypad will function like the joystick, the **Space Bar** will function like **button #1**, and the **Enter** key will function like **button #2**.

From any outside view, press **Ctrl-F1.. F10** to save off the current view. To switch to any of these saved views, use **Alt-F1.. F10**.

Press & hold button #2 while inside to look left, right, fore & aft.



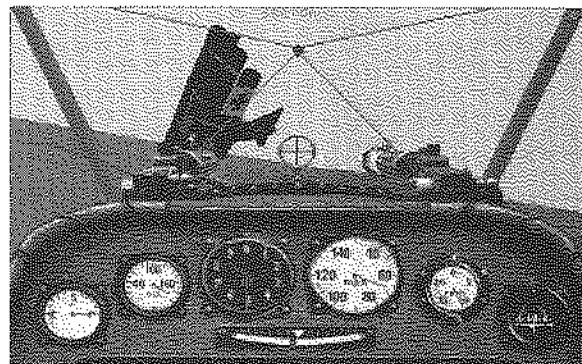
Press & hold button #2 while outside to move viewpoint around plane.



MACHINE GUN CONTROLS

You are armed with one or two forward-firing machine guns (depending upon the plane). That's all the WWI combat pilots needed. Before going up on the mission, you may select what type of ammo to use: *incendiary* or *regular*. Incendiary ammo is used to attack Zeppelins and balloons. It is extremely difficult to ignite a dirigible with regular ammunition. However, regular ammunition is more accurate and less likely to jam the machine guns. Regular ammunition is also better against enemy airplanes than incendiary.

■ NOTE: it is possible for your machine guns to jam permanently. You will receive an on-screen message indicating this if your attempts at unjamming are unsuccessful.



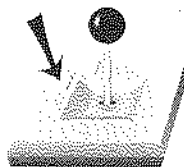
Occasionally, your machine guns will jam. Firing a long burst from your machine gun has a greater chance of jamming your guns than a short burst. This is why the good pilots would fire short bursts in their attacks. If your guns are jammed, you may try to unjam them by **repeatedly** pressing the **U** key. This won't always work, but keep trying.

Keyboard

Fire Machine Gun:
Spacebar

Unjam Machine Gun:
"U" key

Joystick



Button #1 = fire machine gun

Mouse



Left Button = fire machine

TIME COMPRESSION

There may be periods of simulation play where there's not a lot of action going on. Often this is after taking off as you make your way to the front or after the mission is complete and you are making your way back to your aerodrome.

As a convenience, Red Baron contains a time compression mode which will speed up the simulation to many times it's normal speed. Time compression is activated by pressing the C key.

■ To Activate/Deactivate Time Compression, press the C key.

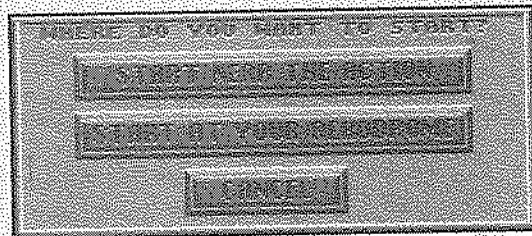
Time compression will be automatically deactivated when you press the C key again, when you fire your machine guns, when you come near enemy aircraft, balloons, Zeppelins, or AA guns, and when you fly near the ground.

IMPORTANT!

It's very difficult to stay in formation when time compression is active. Because of this, Red Baron will automatically enter Auto-Formation when time compression is activated. This will control your aircraft and keep it locked into formation until time compression is deactivated. **Auto-Formation will NOT activate when you are the flight leader unless you are escorting another flight.**

STARTING LOCATION

On some missions a menu will appear, giving you a choice of where you start your flight. You may chose **Start Near the Action** or **Start at Your Aerodrome**. For most missions, it is recommended that you start near the action. The missions will be shorter and more exciting. However, if you want to try your hand at navigating as the WWI pilots did, begin the mission near your aerodrome.



PREFERENCES

There are two main panels that allow you to control game play preferences, the PREFERENCES panel and the REALISM panel. The displayed PREFERENCES panel is available *only* from within the simulation. OPTIONS from the Main Menu will bring up an abbreviated version which does not contain detail level controls.

PREFERENCES PANEL

Press **F10** from the simulation to activate.
Press **ACCEPT** or the **ESC** key to exit.

■ **NOTE:** Settings and adjustments made to either the PREFERENCES or REALISM panels are automatically saved to disk. The new settings remain even if you quit and restart Red Baron later.

PREFERENCES:

F10 Key from simulation.
Allows the customizing of elements such as active controls, sounds, music, detail levels and game speed.

With the Preferences panel you may tailor some of the technical aspects of Red Baron to your own tastes and computer configuration. You may customize the following game controls:

Joystick ON/OFF

Sound ON/OFF

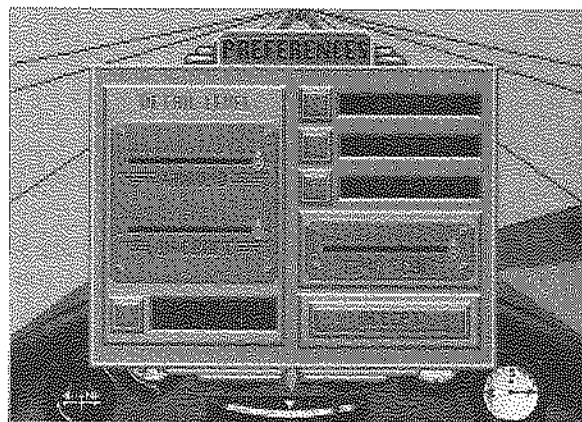
Mouse ON/OFF

Time Scale Adjustment LOW-HIGH

Ground Detail Level Adjustment LOW-HIGH

Aircraft Detail Level Adjustment LOW-HIGH

Combat Button REGULAR/OFF



Detail Levels

The smoothness of simulation play is dependent upon two things: the speed of your computer and the amount of graphic detail displayed. The first of the two, the speed of your computer, cannot be changed. However, with the graphic detail controls, you can reduce the amount of graphic detail displayed. The detail sliders give you control over the amount of graphic detail that your computer is required to display. You may trade off detail for smoother animation according to your tastes. When you first install Red Baron, it will set the detail slider's positions based upon the speed of your computer.

Detail Levels (cont.)

There are three controls that allow you to select the amount of graphic detail in the simulation. Depending on the speed of your computer, you may want to increase or decrease the amount of graphic detail to control the smoothness of the simulation play.

Aircraft Detail controls how detailed the aircraft displayed will be.

Ground Detail controls how many terrain features (trees, mountains, etc.) are displayed at once.

Combat Button controls the amount of ground detail displayed during combat sequences. When set to *normal ground detail*, the ground detail will remain the same when you enter aerial combat. When set to *no ground detail*, the ground detail will be cut back during combat. This will increase the smoothness of animation during combat.

Time Scale

■ **Time Scale slider settings**
LOW = Slower& easier to control.

HIGH = Faster& more difficult to control. Best for slower computers.

Time Scale control is provided to help in customizing the pace of simulation play to best fit your tastes. If battles are moving too fast for you, move the Time Scale slider towards LOW. This will slow the action down. If you're playing on a machine that runs slow *even with the Detail Levels turned down*, try moving the Time Scale slider towards HIGH. This will speed up the action.

REALISM PANEL

Press **Alt-R** to access

Press **ACCEPT** or the **ESC** key to exit

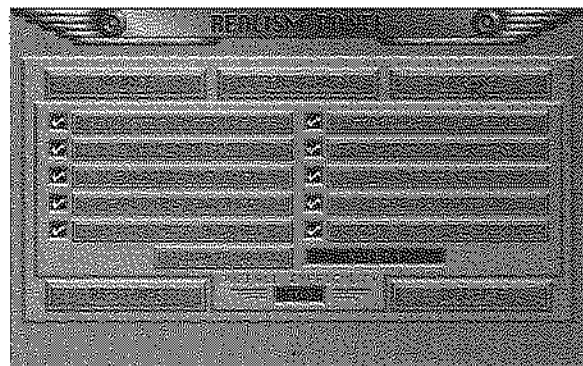
Press **RESTORE** to cancel

■ REALISM

Alt-R from simulation.
Allows the customizing of elements that control gameplay such as difficulty levels, flight model, instrumentation display and pilot/world realism.

You may change any of the realism settings from either the Mission Assignment screen or from within the simulation itself. The settings allow you to customize certain features of the game to your own tastes. In most cases, each setting gives you a choice between ease of use, and realism.

There are 11 settings you may switch from *realistic* to *nonrealistic*. When a setting is set to *realistic*, a red check mark appears beside it. Pressing the button for the setting will switch it between its available states (in the case of the Flight Model, there are 3 possible settings). For convenience, we've included three buttons at the top of the **REALISM** panel to allow you to change all the settings at once. Each has default settings for different skill levels including **Novice**, **Intermediate**, and **Expert**. Following are descriptions of the **REALISM** settings available.



Realistic Instruments. When **turned on**, the only instruments seen from the cockpit will be the ones that existed on the original WWI aircraft. When **turned off**, all possible instruments will be displayed.

Sun Blind Spot. When **turned on**, the Sun Blind Spot will cause a glare whenever your view is placed directly at the sun. Enemy aircraft which are in the sun will not be visible until they are very close.

Realistic Weather. If **turned on**, the weather conditions will vary from mission to mission. If **turned off**, the weather will always be perfect: the sky will be clear with no clouds, and there will be a light wind.

Gun Jams Allowed. The machine guns of WWI were very unreliable and would jam frequently. The longer the gun was fired, the greater the chance it would jam. Pilots would often carry a hammer or mallet with which to hit their machine guns in case of jamming. When **Gun Jams Allowed** is **turned on**, your guns will periodically jam when fired too frequently. When **Gun Jams Allowed** is **turned off**, your machine guns will operate perfectly, never jamming.

Blackouts Allowed. The pilots of WWI didn't have oxygen masks, and consequently a pilot who flew above 20,000 feet for too long would get dizzy and occasionally even blackout from lack of oxygen. Hopefully, when the pilot's aircraft went into a dive, the pilot would wake up before hitting the ground. When **Blackouts** is **turned on**, blackouts are possible. When **turned off**, blackouts will never occur.

Carburetor Freezes. At high altitudes, it gets very cold. The carburetors would often freeze, especially during winter months. This would cause a complete loss of power until the carburetor would thaw out, which could only come about if the aircraft was brought to a much lower altitude. When **Carburetor Freezing** is **turned on**, your plane's carburetor will freeze at higher altitudes. When **turned off**, the carburetor will never freeze.

Limited Ammunition. The great pilots would fire their guns sparingly, closing to within 30 yards and firing a short, decisive burst. This takes skill, but it can be mastered. If **Limited Ammunition** is **turned on**, your ammo supply will be limited. If **turned off**, you can spray the sky with bullets for as long as you like, assuming your guns don't jam.

Limited Fuel. Most of the aircraft had enough fuel to fly for two and a half hours. When **Limited Fuel** is **turned on**, your air time will be limited to your plane's fuel capacity. When **Limited Fuel** is **turned off**, your fuel supply will be indefinite.

REALISM PANEL

Real Navigation. When **Real Navigation** is **turned on**, you will fly as the WWI pilots did... without sector coordinates displayed. You will have to navigate with the map, and by viewing natural landmarks on the ground below. When **turned off**, your sector coordinates will be displayed on the screen. This is useful when you are acquainting yourself with navigation.

Aircraft May Be Damaged. When **Aircraft May Be Damaged** is **turned on**, your aircraft will be susceptible to damage. When **turned off**, your aircraft will become invulnerable. We recommend the **off** setting for beginning Red Baron players only. Your score will be very low if this is turned off.

Flight Model. **Flight Model** allows you to select the level of realism your airplane can handle. The settings are: **Novice**, **Intermediate**, and **Expert**. Novice is the easiest to use, while expert is for experienced pilots.

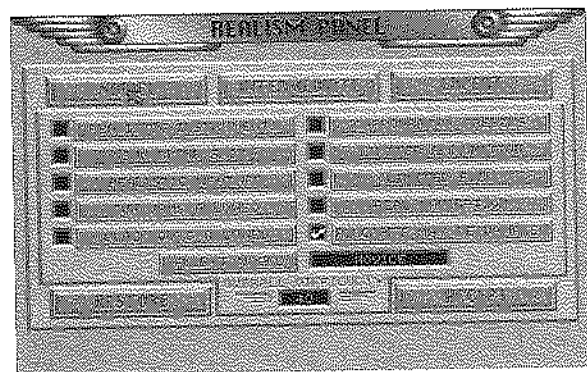
Novice setting: flying is easy, turns are straight forward. If you bank the aircraft, it will turn. Your aircraft will not nose down in a turn.

Intermediate setting: turning is modelled more realistically. In order to turn properly, you will have to apply back pressure (pulling back on the stick) to keep the aircraft turning and keep the nose above the horizon. Some rudder may be needed as well. Unlike novice, if you bank the aircraft without using back pressure, your turn will quickly degenerate into a slow spiral dive. Landing is also more difficult.

Expert setting: this will test all of your flying abilities. Not only are turns modelled realistically, but the danger of going into a spin is present. The various quirks of certain aircraft are also included. For instance, the gyroscopic effect of the Sopwith Camel's rotary engine will make a simple turn a difficult, tricky maneuver. And, if too much stress is put upon your aircraft's wings during a high speed dive, your wings may break!

Score Factor:

Mission success, promotions and your placement on the high score listing are all based upon your scoring, or point total, at the end of a mission. There are two main factors in determining your score after a mission; **your performance** and the **score factor**. Scoring for mission performance is based upon how well you achieved the goals of the mission, how valiant your moves were and whether you survived the mission intact. Your overall score for the mission is derived by multiplying your **mission score** by the **score factor**. The **score factor** is displayed at the bottom, center of the REALISM panel under the OVERALL DIFFICULTY heading. It reflects the difficulty of the current REALISM settings. Increasing the number of *realistic* settings on the REALISM panel will increase your **score factor**.



IMPORTANT! Once you enter the simulation, a 30 second 'grace' period begins. Any changes to the REALISM settings must be made before this period is up in order for the changes to be reflected in the **score factor**. Settings turned on after the first 30 seconds of simulation play will be displayed in lightened text to reflect that they were changed after the 'grace' period and have no bearing on the **score factor**.

WEATHER

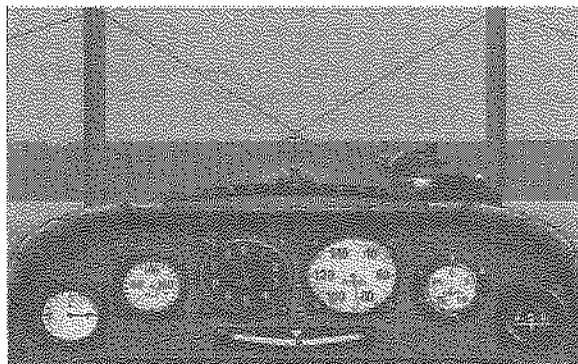
From the Realism panel you may turn on and off realistic weather. With it turned off, there will be no clouds in the sky and there will be a light wind blowing eastward. If you turn it on, the weather conditions will vary from mission to mission.



- Top: heading for cloud cover.
- Bottom: Losing visibility in the cloud bank.

The wind will play an important part in your missions. Generally the wind gives German pilots an advantage as it usually blows toward the German side. This makes it difficult for Allied pilots to fly home when they are over German territory. The stronger the wind, the more advantage German pilots will have.

Clouds will add to the complexity of the combat tactics. Diving into a cloud is a good way to lose a pursuer. On the other hand, clouds may be hiding enemy aircraft waiting to strike. Clouds may also obstruct the sun, thus taking away the ability to dive out of the sun on an enemy.



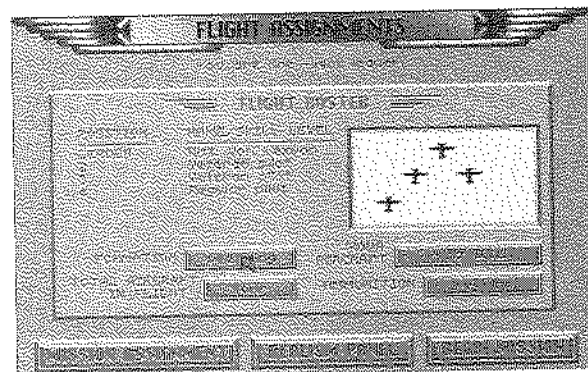
YOUR FLIGHT GROUP

The group of 1 to 4 aircraft that you fly with is called a *flight*. Your *flight* will travel together and protect one other.

Formations

When a *flight* goes on a mission, it will fly in formation. If you are the *flight* leader, the rest of your *flight* will fall into formation. The types of formations that you may fly include: solo, line abreast, line astern, vee, box, echelon and diamond.

If you are not the *flight leader*, fly with the rest of the formation. Do not stray from the rest of your *flight*.



Flight Leader Commands

Flight Leader Commands
Once airborne, WWI pilots would communicate with arm gestures. As a member of a formation, you will be given orders by your *flight* leader during the mission. These will be indicated as a text message that appears on your screen.

If you are the *flight* leader, you will have the opportunity to give orders to the members of your *flight*. However, keep in mind that once you enter combat your commands will go unnoticed — the rest of the *flight* will be busy keeping their eyes on the enemy. If there are three or more aircraft in your *flight*, some aircraft will make up the 'minor wing'. The *flight* leader may give orders to the minor wing separately from the rest of the *flight*. With three aircraft, the third aircraft in the formation makes up the minor wing. With four aircraft, the third and fourth aircraft make up the minor wing.

YOUR FLIGHT GROUP

Flight Leader Commands

DROP BELOW

Key Command: **D**

Order the minor wing to drop about 500 feet below the rest of the flight. This tactic can be used to flush out enemy aircraft. Enemy aircraft will often attack the seemingly helpless aircraft of the minor wing, unaware of the aircraft above them. When they do so, the aircraft above may swoop down on the enemy. Be warned that this tactic leaves the minor wing exposed. This order will be ignored if the flight is at low altitude.

JOIN

Key Command: **J**

Order the minor wing to rejoin the rest of the flight. If the flight descends to a low altitude, then the minor wing will automatically rejoin the rest of the flight.

ATTACK!

Key Command: **A**

Order the entire flight to attack the enemy.

MINOR WING ATTACK!

Key Command: **M**

Order the aircraft in the minor wing to attack the enemy.

WARNING!

Key Command: **W**

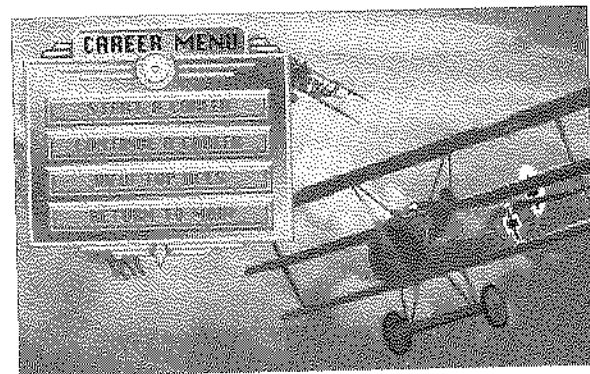
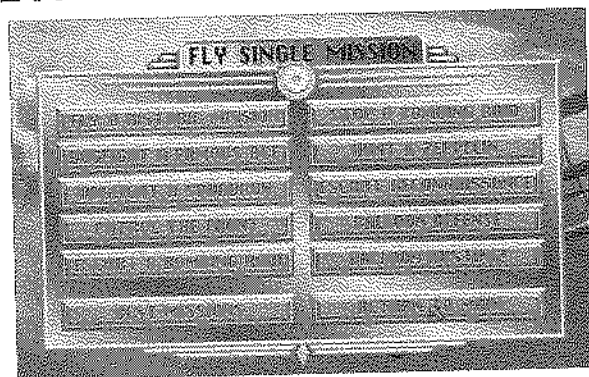
Alert the rest of the flight that enemy aircraft have been spotted. If you issue this warning when there are no enemy aircraft around, then the rest of the flight will ignore your warnings for the rest of the mission. You may issue a Warning even when you are not the flight leader.

SIMULATION OVERVIEW

Red Baron has two play options, Fly Single Mission and Career. Single Mission offers you the choice of ten randomly generated mission types and allows you to custom tailor your squadron and the conditions of simulation play. Career allows you to enlist as an officer of either the German Air Service or the Royal Flying Corps. You will fly multiple missions, progressing through the war until you are either killed, grounded or the war ends. In Career play, you are given much less control over the mission conditions. You must earn the right to command, transfer and change plane types.

Missions in both Fly Single Mission and Career can be recorded and saved to disk. These saved missions, or tapes, can then be replayed with the Mission Recorder. You can record, save, playback and manipulate any of your missions. You can even *re-enter* a saved mission, completely altering the mission's outcome. Altered missions can then be saved to disk for later viewing or manipulation.

On the following pages, you will find in depth descriptions of Single Mission, Career and Mission Record.



FLY SINGLE MISSION

The first of the two options of simulation play is Fly Single Mission. Single mission play allows you to tailor many elements of your mission: the type of mission you'll go on, on who's side you'll fly, the conditions you'll encounter, who you fly with (and against) and the type of planes used. Fly Single Mission is the quickest way to get into the simulation. You simply select the type of mission you want to fly, set the conditions and play! After your custom mission is completed, you'll receive an evaluation of your performance and a score based upon the REALISM settings, goals achieved and number of kills.



Mission Types

When Fly Single Mission is chosen from the Main Menu, a new menu will pop-up displaying the types of missions available.

Fly a Historic Mission

Relive the great aerial battles of the war.

Dogfight a Famous Ace

Have you got what it takes to go head-to-head with the mighty Red Baron himself? Find out as you go up against the war's greatest pilots.

Dogfight a Squadron

Engage an enemy flight of fighters and try to clear them out of the sky. Just remember that they're trying to do the same to your flight.

Patrol the Front

Patrol the front and engage any enemy recon or fighter airplanes you come across.

Escort a Bombing Raid

Your bombers are about to penetrate deep into enemy territory to bomb strategic targets like RR yards, factories, and supply dumps. It's your mission to see that they succeed.

Stop a Bombing Raid

Intercept enemy bombers who are trying to bomb your side.

Hunt a Zeppelin

Locate one of these high flying dirigibles and send it down in flames. It's best to use incendiary ammo.

Escort Reconnaissance

Protect a recon plane on its mission to take aerial photographs. Enemy fighters will be gunning for both the recon plane and you.

Balloon Defense

Protect your observation balloons from the enemy!

Balloon Busting

Take out the eyes of the enemy. These large gasbags of hydrogen burn easily. It's best to use incendiary ammo.

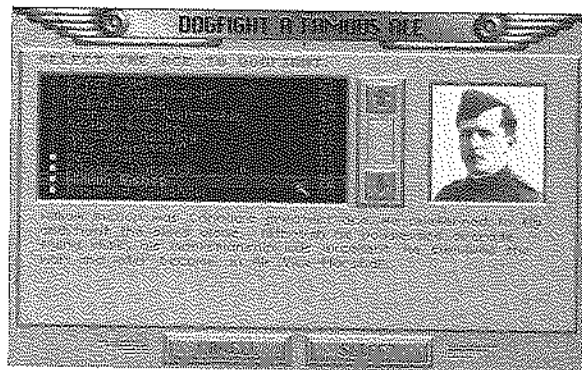
FLY SINGLE MISSION CONDITIONS

Once a mission type has been chosen, you will be able to tailor the conditions of the mission. The number and type of conditions available for change vary from mission to mission. Following is a breakdown of mission types and their available options.

Dogfight A Famous Ace

After selecting DOGFIGHT A FAMOUS ACE, you will be asked to select the ace you wish to dogfight. Pressing the Up and Down arrows will scroll through the selection window. As each ace is highlighted, a description will be displayed showing the ace's name, alliance, total credited victories in the war and a description of their known tactics. Pressing the SELECT button will accept the currently highlighted ace.

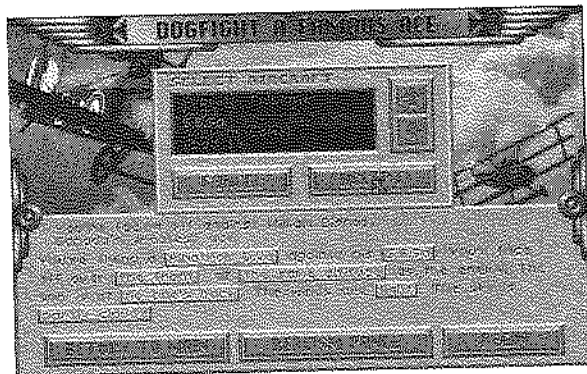
Once an ace has been selected, the Mission Setup screen will be displayed. The Mission Setup screen will display the name of the mission type and a text area in which you may set up your mission. In the text area, changeable options are displayed as a button in the text. Clicking on one will bring up a menu with your possible options. Select the option you want. All buttons except those on the pop up menu will be inactive when a pop up menu is displayed.



The following options are available under Dogfight A Famous Ace. Press the ACCEPT button when you've set the conditions to the desired settings.

Your Aircraft Type: you may select any aircraft from either side of the war.

The Ace's Aircraft Type: the selected ace will default to his preferred aircraft, including any historical markings and insignias. You may choose any type for the selected ace. If you want, you can put the Red Baron into a Sopwith Camel and see how he handles it!



Where You Will Battle: you can chose from *over the front*, *over German territory*, and *over Allied territory*. It is an advantage to meet over your own territory as it's easier to land.

Altitude: it's an advantage to start higher than your opponent. This allows you to decide when combat begins. If you want more of a challenge, start at a lower altitude than your opponent.

Sun: you may choose the positioning of the sun at the start of combat. Your choices are *at no one's back*, *at your back*, *at his back*. The pilot who starts with the sun at his back has an advantage, being able to "hide" in the sun's glare.

Wind And Sky: you may set the weather conditions.

Wind: *still*, *light*, *strong*.

Sky: *clear*, *partly cloudy*, *cloudy*, *overcast*.

FLY SINGLE MISSION CONDITIONS

DOGFIGHT A SQUADRON

The Dogfight a Squadron mission is similar to DOGFIGHT A FAMOUS ACE, except you may also select:

The side that you will fight for: you may select German Air Service or Royal Flying Corps.

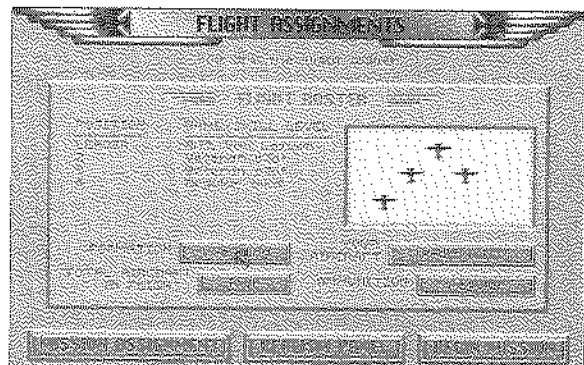
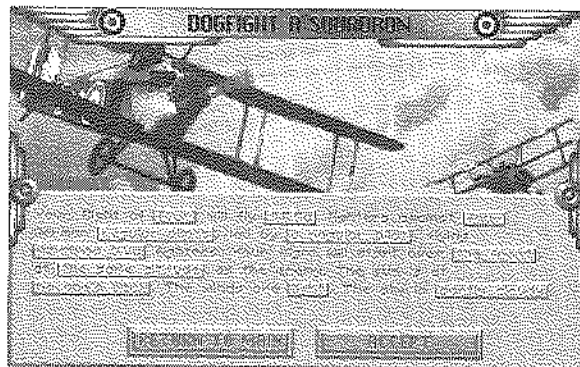
The number of aircraft in your flight group.

The type of ammo used: you may select between Regular and Incendiary. In a Dogfight it is assumed that Regular ammo will be used. This may be changed in the Flight Assignments screen.

The type of aircraft your flight group will use: you will only be able to select aircraft available to your selected alliance.

The formation your flight group will fly in: depending upon the number of aircraft in your flight group, you may choose between *line abreast*, *line astern*, *echelon*, *vee wing*, *diamond* and *box* formation.

The number of aircraft in your opponent's flight group.



The type of aircraft your enemy's flight group will use: you will only be able to select aircraft available to the enemy's alliance.

The quality of your pilots: Novice, Regular or Veteran (see below).

The quality of the enemy pilots: Novice, Regular or Veteran (see below).

The leader of the enemy pilots: This may be any of the famous aces or an anonymous pilot of any quality.

Pilot Quality:

Novice—Just out of flight training. They are the poorest pilots, prone to be paralyzed in combat. They often take impossible shots. A novice will never use a maneuver in combat. They are the guys with a one in ten chance of surviving their first dogfight.

Regular—Pilot with some combat experience. He doesn't make stupid mistakes in combat, but does nothing brilliant either. Will occasionally do some of the simpler maneuvers: Zoom climbs, Wing-Overs, and Barrel Rolls.

Veteran—A good pilot that flies and fights intelligently. He is skilled at many maneuvers and will pose a serious challenge to even the best of opponents.

FLY SINGLE MISSION CONDITIONS

FLY A HISTORIC MISSION

From Fly a Historic Mission, you can choose to fly a famous, historical air battle. All conditions of this single mission are preset to match the actual historic event.

Once selecting Fly Historic Mission, you will be asked to select the historic mission you wish to participate in. Pressing the Up and Down arrows will scroll through the selection window. As each Historical Mission is highlighted, text will be displayed describing the mission. In the upper right corner of the screen a picture of the famous ace featured in the mission will be shown.



Below the selection window are buttons marked *British* and *German*. These allow you to decide which side you wish to fly for in the mission. If you choose the side that the featured ace flew on, you will take his place in the mission. Choosing the other side will pit you against the featured ace. The text description of the mission will change to reflect your mission, depending upon which side you choose to fly on.

Pressing *Begin* will start the mission.

ALL OTHER MISSION TYPES

This section describes the conditions available for all missions other than Dogfight a Famous Ace and Dogfight a Squadron.

The side that you will fight for: you may select German Air Service or Royal Flying Corps.

The number of aircraft in your flight group: you may select up to four aircraft.

The type of aircraft your flight group will use: you will only be able to select aircraft available to your selected alliance.

The type of ammo used: you may select between Regular and Incendiary.

The formation your flight group will fly in: depending upon the number of aircraft in your flight group, you may choose between *line abreast*, *line astern*, *echelon*, *vee wing*, *diamond* and *box* formation.

Time: you may select between *daytime*, *dawn*, *dusk* and *night*.

Wind And Sky: you may set the weather conditions.

Wind: *still*, *light*, *strong*.

Sky: *clear*, *partly cloudy*, *cloudy*, *overcast*.

Pressing *Accept* will take you to the Mission Assignment screen.

THE MISSION ASSIGNMENT SCREEN



or all missions except Dogfight a Famous Ace, you will receive all data regarding your upcoming mission from the Mission Assignment Screen. From the Mission Assignment screen you will receive the following information:

The Date: The date that the current mission takes place on.

Map Reference: There are 5 off-line maps used for navigation in Red Baron. Each mission will require you to use a specific map. The name of the map needed for the current mission is listed below the date.

Situation: Supplies you with any information available on your current mission. This will include your orders and the specific goals that you are to achieve.

Mission Plan: The Mission Plan lists the recommended sequence to carry out your mission. This includes necessary map coordinates of your starting point, your flight path, and where to engage enemies.

If you are following a flight leader, he will follow the Mission Plan exactly as specified. However, if *you* are the flight leader, you may come up with your own mission plan.

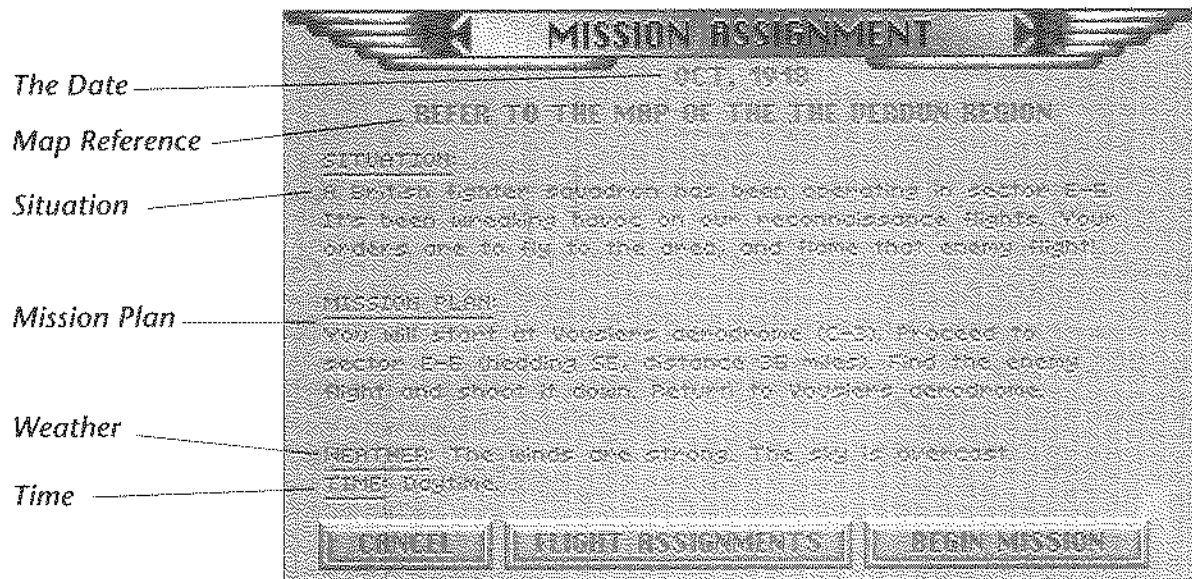
Weather: Gives you a description of the weather conditions in the area where your mission will be carried out. This includes descriptions of wind conditions and visibility.

Time: Describes the time of day when the mission begins.

Buttons: FLIGHT ASSIGNMENTS goes to the FLIGHT ASSIGNMENTS screen. BEGIN MISSION will start your mission. CANCEL returns you to the Main Menu.

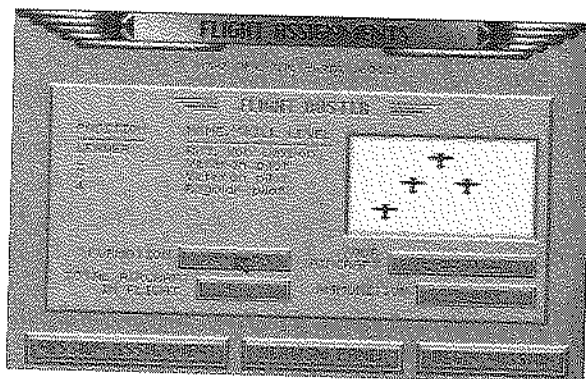
To carry out your mission, you'll first refer to the Mission Assignment screen. In the below example, it indicates where the enemy fighter squadron has been spotted, sector E-6. Refer to the map of the Verdun Region to locate this position.

You are starting at Voursiers aerodrome. Look at the map of the Verdun Region. You will find Voursiers aerodrome in sector C-3. According to the flight plan you will be flying 35 miles SE to reach your destination, sector E-6. Once there, you are to locate the enemy flight and dogfight it. After you've destroyed or chased off all the enemy fighters, you are to return to your aerodrome, Voursiers.



THE FLIGHT ASSIGNMENTS SCREEN

Available from within the Mission Assignment screen, the Flight Assignments screen gives you a complete breakdown of the settings for your flight group. You can change settings for *Formation*, *Total Aircraft in Flight*, *Your Aircraft* and *Ammunition*. Along with a graphical representation of your currently selected formation, you will receive a listing of the position for all pilots in your flight. This will indicate the flight leader (this will always be you in Fly Single Mission) as well as the skill levels of all other pilots. The pilots, and their skill levels, that are assigned to fly with you are based upon the historical context and random generation of the mission you are flying. This will change with each mission you fly. You may also find that you are sometimes assigned an ace to fly as part of your flight group. This is dependent upon the mission type, the time that it occurs and the known location of individual aces at the time.



Pressing *Begin Mission* will enter the simulation.

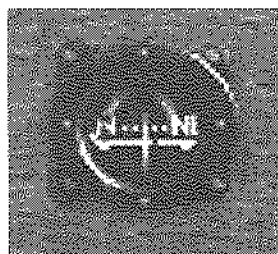
Pressing *Realism Panel* will bring up the Realism panel.

Pressing *Mission Assignment* will take you back to the Mission Assignment screen.

NAVIGATION



Once you have your orders, you'll be required to navigate your way through the world. You will be required to find the enemy on many missions, and to find your way back to your own aerodrome. To navigate, you will use one of the 5 maps supplied with Red Baron. Use the compass to fly on your desired heading. To locate yourself on the map, watch the natural landmarks below.



On the REALISM panel you may turn Realistic Navigation off. When off, the current sector you are in will be displayed on the screen. This will make navigation much simpler because you will always know where you are.

Directional Abbreviations

N	north
NNE	north-northeast
NE	northeast
SE	southeast
SSE	south-southeast
S	south
SSW	south-southwest
SW	southwest
ENE	east-northeast
E	east
ESE	east-southeast
WSW	west-southwest
W	west
WNW	west-northwest
NW	northwest
NNW	north-northwest

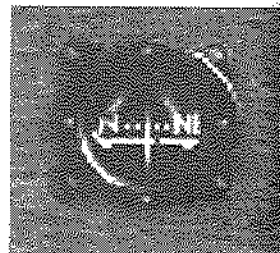
How to Fly to a desired location

On some missions you will start in the air near the enemy. On these missions, you will not be required to navigate to find the enemy aircraft. They will be within visual range. On escort missions you will not need to navigate (unless the aircraft you are escorting are shot down, and you must find your way back to your home aerodrome). You will only need to follow the aircraft you're escorting.

However, on some missions you will start out on the ground at your aerodrome and will be required to fly to a specified sector to find the enemy. On these missions, the Mission Assignment screen will tell you on what heading you must fly to reach the sector. It will also tell you how far away your destination is. The standard direction abbreviations (as displayed on left) are used. The abbreviations N, NE, E, SE, S, SW, W, and NW correspond directly to the compass in your aircraft. Flying in these directions is easy. For example, to fly NE (northeast), line up your aircraft so that the compass reads NE.

The other abbreviations, NNE, ENE, ESE, SSE, SSW, WSW, WNW, and NNW do not appear on your compass. You may still fly in these directions. For example, if your mission plan instructs you to fly NNE (north-northeast), then line up your aircraft so that the compass reading is halfway between N and NE.

As you make your way to the sector, you should keep an eye on the map and watch natural landmarks below. These serve as checkpoints to let you know you're going in the right direction and are not off course. For example, to fly from Toul aerodrome to sector D-5, you may follow the Meuse until you cross the front. Once across the front you'll be in sector D-5.



You need not always fly just by compass. Sometimes it's easier (as in the above example) to fly by following a river, road, or rail-line. For example: if you are flying in the Verdun region and your mission requires you to fly from Toul aerodrome to the city of Metz, then you will only need to follow the Moselle river North until you find Metz.

Flying from Toul to the city of Tellancourt is a little more difficult. You may fly North until you come to the front. You should find the city of St. Mihiel. Once there, you may follow the northern-running road until you reach Tellancourt.

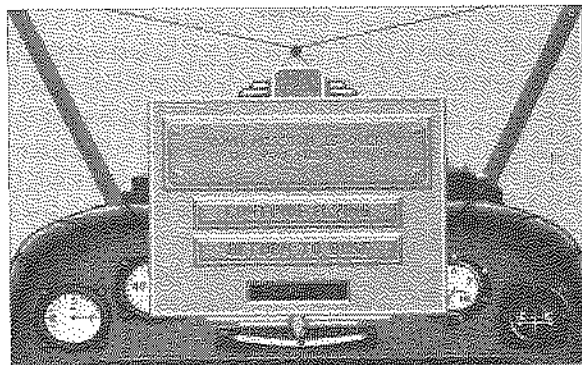
If you get lost, the first thing you should do is try to determine your present location by looking at the ground below and matching up the landmarks against the map. Large, obvious bends in rivers, bends in the front, as well as landmarks like cities and aerodromes can be used to place your location on the map.

If you still can't determine your location, find the front (which is generally easy), and fly to your side of the lines. Land at the first friendly aerodrome you find. As a last resort, you may land in a field on your side of the lines.

ENDING THE MISSION

Quitting

You may quit at anytime during your mission as long as your aircraft is not fatally damaged and you are not near an enemy. However, you will receive more points for landing at your aerodrome. When your mission is complete, a message will be displayed asking if you want to quit. You may quit now without penalty, however, **if you quit before the mission is complete, you'll leave any friendly aircraft and balloons at risk!**



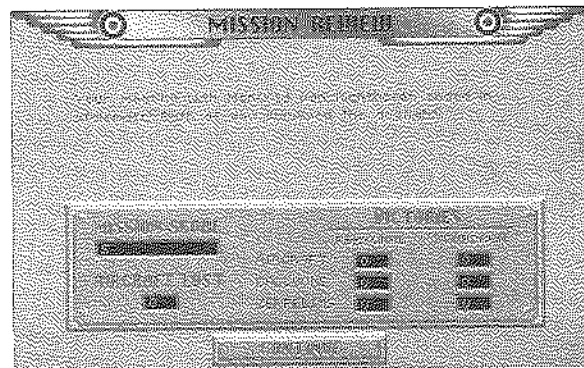
Endings

If you crash, you may either walk away with no injuries, end up in a hospital or be killed, depending upon the severity of the crash. If you are hospitalized, you will remain there until you recover from your injuries. If you land or crash (and survive) in enemy territory, you may end up in an enemy prisoner of war camp.

Mission Review

Following every mission will be the Mission Review screen. On it you will see:

- A text description with the results of your mission.
- Your mission score.
- How many aircraft from your flight were lost.
- How many victories (aircraft, balloons, Zeppelins) that you shot down personally, and how many your squadron shot down.



- If you do well in your mission review, you may have a chance to enter your name in the Best Missions top 10 listing.

ENDING THE MISSION

Scoring

Scoring in Red Baron is based upon a number of different factors:

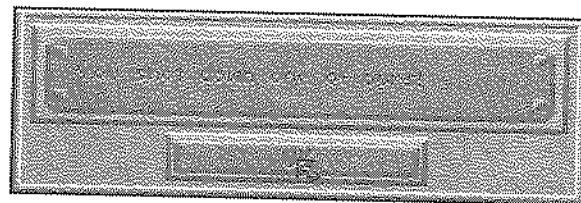
- Successful completion of your mission.
- Points for shooting down enemy aircraft and balloons. Zeppelins are worth a lot of points.
- Lose points for aircraft in your flight being shot down.
- Bonus points for landing at your own aerodrome upon completion of your mission.
- Your score is multiplied by the score factor, specified in the Realism panel.

In any of the missions available under Fly Single Mission, your score will determine your standing in the Best Missions listing. In Career mode, your score has a great impact upon your ability to advance in rank.

Board of Inquiry

If you screw up and shoot down a friendly aircraft during your mission, you'll come before the board of inquiry.

Going before the Board of Inquiry during Fly Single Mission mode of play will be reflected in your score. In Career mode, the penalties are much more severe. While playing a career, the third visit to the Board will result in stripping of your wings and permanent grounding.



CAREER PLAY

The most challenging game play option is to fly an entire career as either a German pilot or a British pilot. You will enlist in either the Royal Flying Corps or the German Air Service as a fighter pilot. Your career will start in December, 1915, carry you through the Fokker Scourge when Eindeckers ruled the skies, and through to the end of the war on November 10, 1918.

As your career progresses, you'll see the advantage swing back and forth between the German and the Allied pilots as new aircraft are introduced. You will have a chance to fly during Bloody April of 1917 when the Albatros D.III swept the allies from the air, and, in the summer of 1917, to see the allies regain the advantage with the S.E.5a and the Sopwith Camel.

As a fighter pilot you will fly many different missions, including attacks against balloons, Zeppelins and reconnaissance aircraft. You'll also escort missions of bombers and recon planes and dogfight against enemy fighters. Your total victories will increase when you shoot down enemy balloons, Zeppelins, and airplanes.

Of course, your greatest challenges will come when you face off against the famous aces like Mick Mannock, Rene Fonck, and Rittmeister Richthofen. These aces are extremely good, and they are trying to add you to their total victories.

As your victories mount, you will receive promotions in rank. As a British pilot you will start out as a Second Lieutenant, and may be promoted to First Lieutenant and finally Captain. As a German flyer, you will start with the rank of Leutnant, and may be promoted to Oberleutnant, and finally Rittmeister. With greater rank comes more privileges.

As a First Lieutenant (Oberleutnant if playing the German side), you will become a flight leader. When you start your career, you will not be the flight leader and will have to obey your flight leader's orders and follow him in formation. As a flight leader, your flight will follow you and your orders. However, your flight size will be small: only you and one other fighter.

CAREER PLAY

When you are promoted to Captain, you will be given command of flights of up to four aircraft. You will also be given a personal aircraft of your own choice, which you may paint.

As your reputation as a flyer increases, you will have a chance to fly with better squadrons. If you are extremely successful, you'll receive invitations from the most elite squadrons of the war, including the "Storks", the R.F.C's No. 56 Squadron, the legendary "Black Flight", and the most elite squadron of the German Air Service, Jagdgeschwader 1 (J.G.1).

You will be awarded medals in recognition of your bravery and gallantry. As an Allied pilot, the most prestigious award to try for is the Victoria Cross. As a German, you will try to attain the Order for Merit, or "Blue Max." Even more difficult to obtain is the Red Eagle Order. Only one German pilot was awarded it, Rittmeister Manfred von Richthofen.

When you finish your career by surviving to the end of the war, your final standing will be displayed. You could end up as a respected ace, or as a crop duster. The ultimate challenge is to end the war with more victories than the historic totals of the famous aces. If you do this, you'll be the war's "Ace of Aces." The highest scoring Allied ace was the Frenchman Rene Fonck with 75 victories. The highest scoring German ace was none other than the Red Baron with 80 victories.

CAREER MENU

START A CAREER

You will be asked to select your alliance and to enter the name of your pilot. The career roster will track 15 pilot careers at once. If it is full, you will be asked to delete another pilot from the roster or cancel.

Once you've chosen your alliance and typed in your name, you'll be presented with a synopsis. You may change at what time during the war you will start. Options: early in the war, middle of the war and late in the war. You may also change your alliance or your name. Press ACCEPT to begin your career. Good luck!

CONTINUE A CAREER

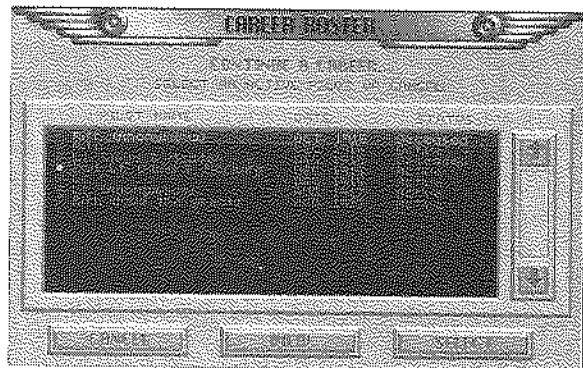
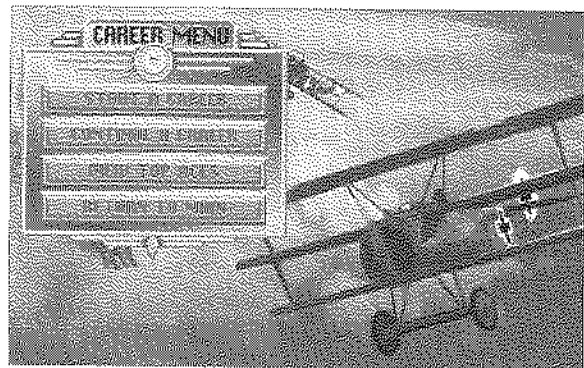
Select which pilot you wish to continue with. Pressing View while a pilot is selected will display the Pilot's Record.

VIEW TOP ACES

Displays the top ten career performances to date, ordered by number of victories. Pressing View while a top ace is selected will display their Pilot Record.

RETURN TO MAIN

Cancels the Career menu, returning to the Main Menu.



AERODROME MENU



ll career play is based from the Aerodrome menu. Between missions you will return to the Aerodrome menu. From this point you will make the decisions that will direct your career.

Fly Next Mission

Pressing *Fly Next Mission*, you will be given your next assignment and will fly the mission. These activities are described in the FLY SINGLE MISSION section. If you end up in the hospital or in prison, time that could be used to score victories will be lost. You can lose up to six months if you are hospitalized or jailed.



Career mode has a few options that are not available in Fly Single Mission. The first is that you may receive medals for your performance. See the Medals and Awards section of this manual for a full description of the medals and awards available. Along with honors, you will also be held responsible for your errors. You may come before the Board of Inquiry after a mission if you've committed some error. The first time you come before the board, you'll be given a mild reprimand. If you commit the same offense a second time, you'll be reprimanded strongly. And if you commit the same offense three times, the board will strip you of your wings and you'll be grounded permanently!

Squadron Info

Pressing *Squadron Info* will show your current station, the date and any famous Aces flying with the squadron.

Map of the Front

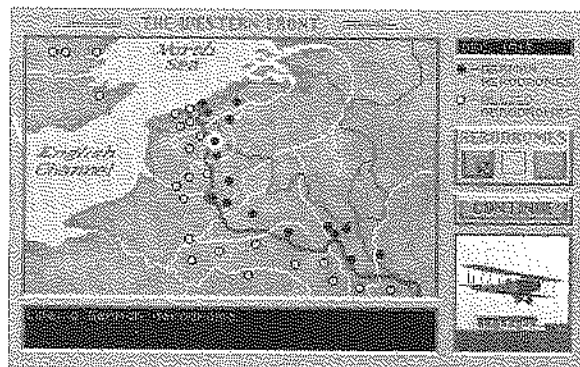
Shows the Western Front and the location of the primary aerodromes. You may highlight each aerodrome by pressing the left or right arrows located on the center, right hand side of the screen. Highlighting an aerodrome will display its name and list any squadrons or aces stationed there at the current time.

Request Transfer

You may transfer to squadrons stationed at other aerodromes. This will give you an opportunity to fly with other aces in different regions of the Front.

You'll also face off against different enemy aces on your missions depending on which region you're in. As you progress in rank you'll have the opportunity to transfer to better squadrons. If you're doing very well on the British side, you may have the chance to fly with No. 56 Squadron of the R.F.C. and fly with some of the great British aces including Mick Mannock and James McCudden. As a German pilot, you may attain enough clout to fly with J.G.1, home to many of Germany's greatest aces, including Ernst Udet and Manfred von Richthofen.

When you transfer, the map of the Western Front will be displayed, and it will show you where your new squadron is stationed. Once transferred, you'll have to remain at your new aerodrome for at least four months before transferring again. The R.F.C. and the German Air Service won't let their pilots transfer willy-nilly all over the front.

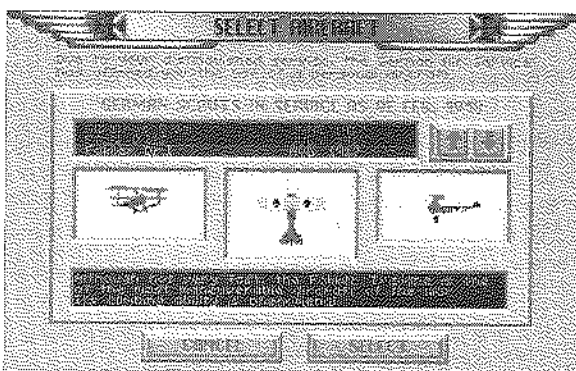
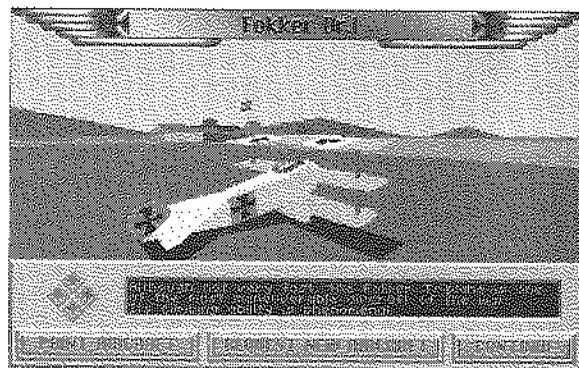


AERODROME MENU

Personal Aircraft

After reaching the rank of Captain or Rittmeister, you will be given the use of a personal aircraft. On the Personal Aircraft screen you may view your plane, request a new aircraft and paint your plane. The arrow keys on the bottom left of the screen allow you to change the view of your aircraft. You can zoom the camera in/out and rotate it left/right.

Pressing *Paint Aircraft* will bring up the painting menu. You may paint two sections of your aircraft: Wings and Fuselage. Select which part of your plane you wish to paint and then the color you wish to paint it.



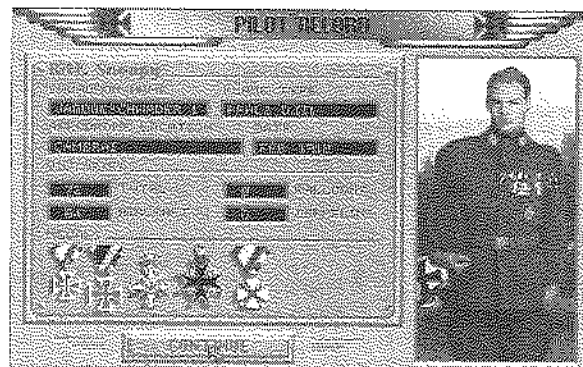
Pressing *Request New Aircraft* will bring up the Select Aircraft screen. Your choices of aircraft will be dependent upon the side you are flying on and the progression of the war. As time progresses and airplane design improves, you will be allowed to choose more sophisticated aircraft.

NOTE: you must use your current aircraft for at least three months before requesting another aircraft!

Press *Continue* to go back to the Aerodrome menu.

View Pilot Record

Pressing *View Pilot Record* will display the current record for your pilot. It will display the name and rank of the pilot, what squadron he is assigned to, which aerodrome he's stationed at and which aircraft he's flying. In addition, it will display his total victories against other aircraft, balloons, Zeppelins, and his total victories (the sum of the aircraft, Balloon, and Zep victories). Also displayed is the career score, which is the accumulation of all mission scores, and all medals that have been received.



Backup Career

If you have a pilot who is doing very well, you may want to backup his status just in case he's shot down. After pressing *Backup Career*, enter the name under which you wish to backup the career. If the career roster is full, you will be prompted to delete another pilot or to cancel. This backup career may be restored from the *Continue A Career* option in the Career Menu.

NOTE: A pilot's most current career progress is automatically saved upon exiting the Aerodrome menu. Backup Career is used to save a separate version of the current career for later restoring. This is useful for undoing a mistake you've made in a mission. If you die or perform an act that damages your career, you will have the option of *restoring* the backup career and replaying the mission until you are satisfied with the outcome.

Return to Main

Pressing *Return to Main* will save your current pilot status and return you to the Main Menu. You may later restore this career by pressing *Continue A Career* from the Career Menu and selecting the pilot on the Career Roster.

CAREER SEQUENCES



here are numerous sequences that can occur between missions while playing in Career Mode. You may be promoted, alerted to new aircraft, moved to new aerodromes, transferred to another squadron or challenged by a famous ace.

Rank promotions

As your score increases, you will be promoted in rank. You'll start out as a Second Lieutenant (Leutnant if you're German), and may work your way up to Captain (Rittmeister).

British Rank

Equivalent German Rank

Second Lieutenant

Leutnant

First Lieutenant

Oberleutnant

Captain

Rittmeister or Hauptmann.

With the rank of First Lieutenant (Oberleutnant), you will be a flight leader and may lead the missions you go on. With the rank of Captain, you will be given the use of your own personal aircraft.

New aircraft introductions

As new aircraft are introduced, you will be notified. If you have a rank of Captain (Rittmeister), you will be given a chance to exchange your present aircraft for the new aircraft.

Moving to new aerodromes

From time to time, your squadron may be ordered to move to a different part of the Front. You will be informed of your new station and aerodrome.

Squadron transfers

In addition to being able to transfer from the Aerodrome menu, you may receive special invitations to transfer. Some of the invitations will be for a temporary transfer and some will be for an indefinite period. Manfred von Richthofen's career started when he caught the eye of Oswald Boelcke who requested he transfer to Boelcke's elite Jasta 4. If you are transferred for a temporary tour of duty, you'll be transferred to your official squadron when the tour is up.

Challenges by Famous Aces

Occasionally, famous aces would issue challenges to enemy aces. If you're doing exceptionally well you may receive a challenge by a famous ace to meet at a certain place, at a specified time and altitude to dogfight. You may choose to ignore or answer these challenges.

End of Career

Your career will end with either your pilot being killed in action or surviving to the end of the war (Nov. 10, 1918). If your pilot survives to the end of the war, his final standing in history will be displayed.

MISSION RECORD

Perhaps one of the most exciting elements of Red Baron is the Mission Record feature. With the mission recorder, you can record an entire mission, save it to disk and then replay the saved mission. However, the ability to save and replay a mission isn't what makes this feature so unique. Mission Record will also allow you to *change* the saved mission. You can alter the views, watch the action from nearly any angle (including from behind other planes) and *enter* the simulation again from any point in playback. The changes you make can then be saved, played back and modified even further. You essentially become actor, producer and director of your own WWI aerial dogfights. To help spread the news of your talent, you can copy the recorded missions to floppy disk or transfer them by modem to your friends who have Red Baron. They can then load the files and admire your handiwork first hand.

Lights, Camera, Action!

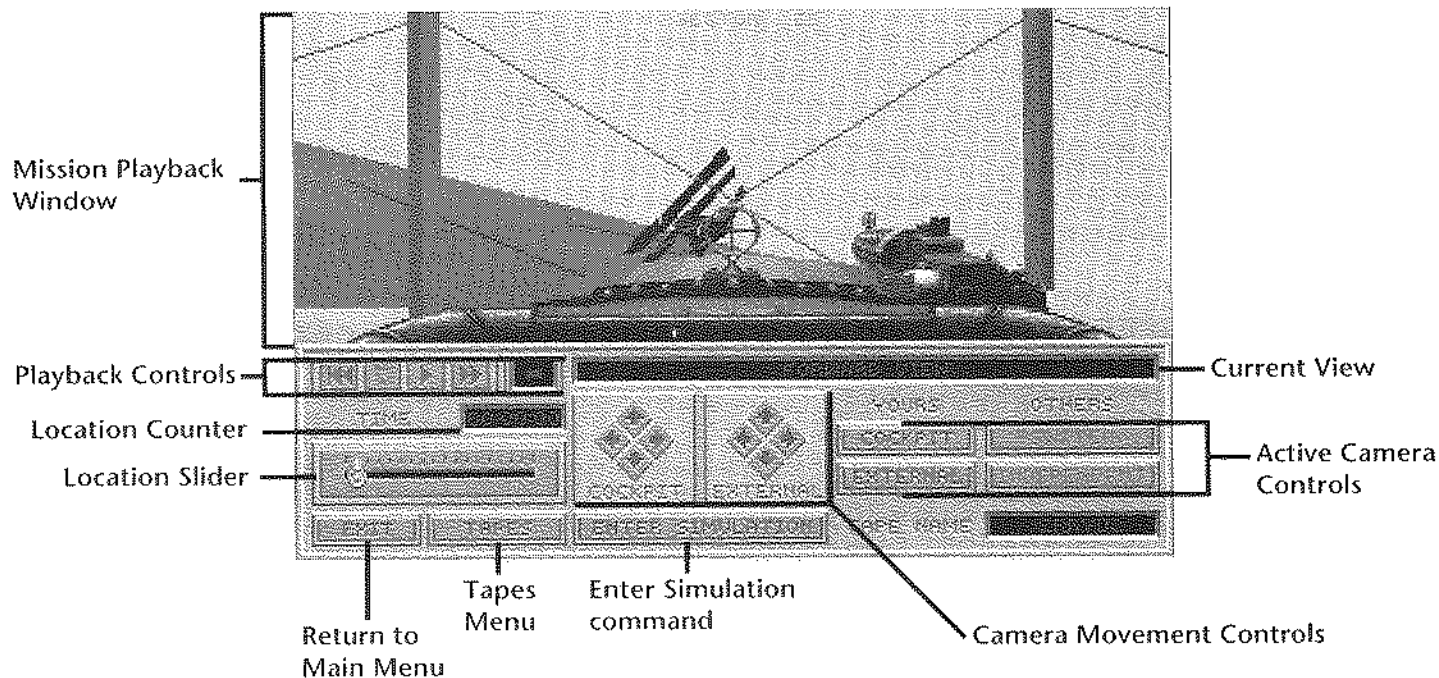
The first step in using the Mission Record feature is to tell the game to record your missions as you play them. Each time you enter the simulation, Red Baron will ask you if you wish to record the mission. Saying yes will automatically start the Mission Record feature. It operates silently and patiently in the background while you storm the skies. When your mission is over, you will be asked to name and save the recorded mission.

- Naming the file and pressing *Save* will automatically save the mission in a sub-directory called **TAPES**.
- Pressing *Cancel* will abort the mission save, erasing the recorded mission and exiting the simulation.

IMPORTANT! the mission name that you choose can be no longer than 8 characters long. If you type a name longer than 8 characters, the computer will cut off the additional characters, saving only the first 8.

Into the Editing Room

Once you have recorded and saved a mission, select Mission Recorder from the Main menu. This will activate the playback mode of Red Baron. You will be shown a menu of all saved missions. Select the mission tape you wish to playback and press *Load*. The tape will load and the Mission Record control panel will be displayed.



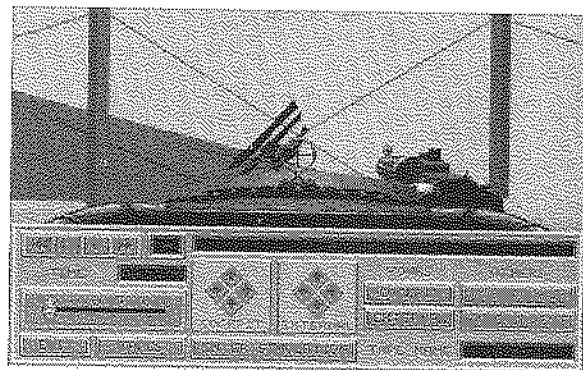
MISSION RECORD

Mission Playback Window

The Mission Playback Window is where playback of your loaded missions is displayed. It will playback the loaded mission exactly as you originally played it. The playback window has two modes of display, **Edit** and **Full Screen**.

Edit displays the Mission Playback Window with the Mission Record controls covering the bottom half of the screen. Use this mode to view and edit.

Full Screen displays the Mission Playback Window without the Mission Record controls. You will see a full screen image of your mission as it plays. Use this mode for viewing only.



To switch between Edit and Full Screen modes, press the **ESC** key.

Playback Controls



The Playback Controls operate like your everyday VCR controls. You can Fast-forward, Rewind, Stop and Play. It should be noted that while you can Fast-forward incrementally, Rewind will only rewind the tape to the beginning. You cannot partially rewind a tape. It's all or nothing.

Location Counter



Operating just like a VCR counter, the Location Counter keeps a running mark of your playback position.

Location Slider



The location Slider operates in two ways.

It will act as a visual marker to display movement through the playing tape.

It will act as a visual Fast-forward slider, allowing you to pick the location you wish to Fast-forward to.

To use the Location Slider to Fast-forward, move the slider bar to the desired distance into the tape. When you release the slider bar, the Mission Recorder will display an on-screen countdown as it Fast-forwards to the specified point. NOTE: the slider cannot be move backward. You must use the Rewind command.

Active Camera Controls



The Active Camera Controls allow you to change the location of the playback camera.

Under the **YOURS** section, you can move the camera between your cockpit and your plane's external view.

Under the **OTHERS** section, you can move the camera between other plane's external views and an independent world camera.

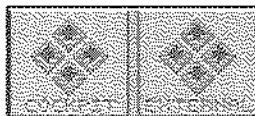
The options of *SWITCH* and *INDEPENDENT* become active when you have switched your camera viewpoint to *EXTERNAL*. Continually pressing *SWITCH* will cycle you through all the external views of all enemy airplanes in the recorded mission. Pressing *INDEPENDENT* will place the camera free from all aircraft movement to be completely controlled by the Movement Controls.

MISSION RECORD

Camera Movement Controls

Once the Active Camera has been chosen, the viewpoint can be fine tuned by using the Camera Movement Controls. The two arrow pads operate slightly differently depending upon where your Active Camera is positioned.

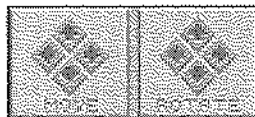
Active Camera Inside Your Cockpit



COCKPIT allows you to look out the forward, left, right and back cockpit views.

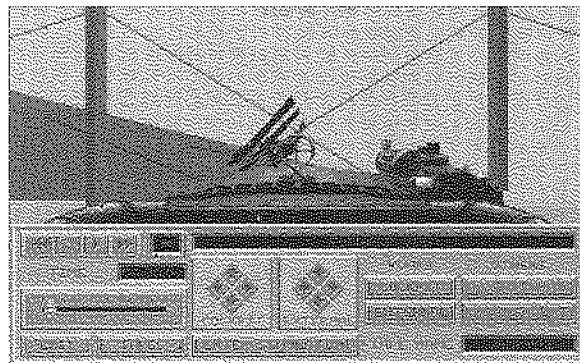
EXTERNAL allows you to switch to forward, left, right and back outside views of your plane.

Active Camera Outside Your Cockpit



MOVE allows you to zoom the camera in/out. In INDEPENDENT mode, it also shifts the camera left and right.

ROTATE allows you to rotate the camera over, under and around.



Tapes

Pressing the Tapes button will bring up the Tapes control panel.

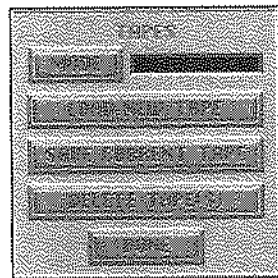
MODE: Switches between *Director* and *View-Only* modes (see below).

LOAD NEW TAPE: Brings up the tape menu for loading tapes.

SAVE CURRENT TAPE: Brings up the tape menu for saving tapes.

DELETE TAPE(S): Brings up the tape menu, allowing you to delete recorded missions. Selecting a mission and pressing *Delete* will delete the mission from the VCR subdirectory.

DONE: Closes the Tapes control panel.



Mode

The Mission Recorder has two modes of operation, *Director* and *View-Only*.

Director mode enables the "save changes" option of playback. While in *Director* mode, all changes made during playback will be stored in memory. Upon Rewinding, Loading a new tape or Quitting, the Mission Recorder will display a prompt asking if you wish to save the changes made to the original tape.

View-Only mode disables the "save changes" option. Changes made during playback will not be saved.

Enter Simulation

Pressing the *Enter Simulation* button at any point during playback will place you back into the simulation. You can replay the mission, making whatever changes you desire. When the mission is over, you will be presented with the options of seeing a Mission Review based upon the changes made or returning to the Mission Recorder. IMPORTANT: Changes made after entering the simulation will not be saved if you are operating in *View-Only* mode!

Exit

Quits the Mission Recorder, returning you to the Main Menu. If you are operating in *Director* mode and have made changes that haven't been saved, you will be asked to Save or Discard your modifications.



Damon Slye

DESIGNER NOTES

The key to dogfighting in WWI was to get on the tail of the enemy plane and make a successful shot. Shots from other locations were very difficult because they required the pilot to lead the enemy plane too much. Occasionally, a good pilot could make a head-on shot. However, over 90% of all aerial victories were made by a shot from behind the enemy. Therefore, the challenge was to position one's plane behind the enemy plane.

To get on the tail of the enemy, pilots employed a variety of tactics. The easiest method was to sneak-up unobserved on the enemy pilot and shoot him down before he knew he was in danger. However, when both enemy pilots were aware of each other, a dogfight would develop, with each pilot trying to get on the tail of the other. At this point the battle became a test of flying skill and tactics.

This was the essence of what we wanted to capture with Red Baron. The hard part was getting the computer controlled enemy pilots to choose the proper tactics at the right times. A lot of effort went in to having them pick and perform appropriate maneuvers (for example doing a Split-S when an enemy is on your tail). We also modelled different skill levels of pilots. The novice pilots in Red Baron will often 'freeze-up' when an enemy is on their tail and fly straight, as many of the novice pilots in the war did.

The historic aces deserved special attention. We researched each to find out his strengths, weaknesses, and preferred maneuvers in combat. In Red Baron, each of the famous aces is unique from the others. Some have great flying skill but only average marksmanship; some are great marksman and average pilots; and of course some are great at both. Moreover, we modelled the styles of the famous aces. You will never see Manfred von Richthofen do a loop in this product. He believed loops had no place in combat. On the other hand, Werner Voss, who was a very acrobatic pilot, has a wide variety of maneuvers he'll use in combat.

In addition, we strove for as much historical accuracy as possible. For the most part, the locations of the significant historical Squadrons and Jastas are correct. Jagdgeschwader 1 will move around the front as it did. Also, the aces in Red Baron are stationed in their historic squadrons. We have included

many of the insignias and historic colors the aces painted on their aircraft.

In some instances, we had a choice to make between realism and playability. Wherever possible, we left this choice to the player by making it a preference on the Realism Panel.

There were some areas in which we chose to stray from history. The most significant of these is the number of aircraft we allow in a dogfight. Toward the end of the war, the dogfights included as many as eighty aircraft at a time. Of course, given the speeds of today's computers, we can't model this. However, we did include flights of up to four aircraft which the player can command. Perhaps in ten years, Red Baron 4.0 will include dogfights with eighty planes instead of eight.

In addition, the front in Red Baron does not move. For most of WWI it was static. It was not until very late in the war that it changed. We decided that moving the front didn't add anything to the experience of being a WWI pilot. The action was in the air.

Finally, we allow the player to paint his aircraft as a British pilot. While it was the custom of the German pilots to do so, the R.F.C would never allow their pilots to indulge in such a flamboyant act. We allow it because it's fun.

Researching Red Baron was much more work than we had anticipated. While information on WWII is abundant, information on WWI is more difficult to come by. We had to locate knowledgeable individuals to fill in the blanks that were unavailable through traditional means of research.

First, I would like to thank Ed Usinowicz, a pilot for Old Rhinebeck aerodrome. It is impossible to get any figures on the maneuverability of the WWI aircraft through normal research. Ed was kind enough to take his Albatros D.V up for us and time some important maneuvers for us. Without his help we would have been guessing about how long it took the planes to roll and turn.

DESIGNER NOTES

I would also like to thank Patrick Henry, a modern-day Fokker Triplane pilot. He graciously allowed us to photograph his red Triplane from the cockpit. This enabled us to get the cockpit perspectives correct.

I am also grateful to Neal O'Connor for his excellent work on the Medals and Awards section. He also supplied us with the names of many other WWI aviation historians.

Peter Grosz, who is one of the World's leading experts on German WWI aircraft, supplied us with the technical data and information on the German fighters.

I would also like to thank the people at Sierra. With their assistance, we were able to add the people we needed to do justice to this topic. As you can see from the list of credits, Red Baron had a large team indeed.

Finally, I would personally like to thank the people on the Red Baron team. They are certainly the most talented group of people I have worked with. The design goals for Red Baron were very ambitious. The team rose to the challenge, and came through with flying colors.

Damon Slye

SELECTED BIBLIOGRAPHY

Books

- Angelucci, Enzo, *The Rand McNally Encyclopedia of Military Aircraft 1914-1980*. The Military Press, 1980
- Bowen, Ezra, and the editors of Time-Life Books, *Knights of the Air*. Time-Life Books, 1980. (An excellent overview of the air war. Highly recommended.)
- Botting, Douglas, and the editors of Time-Life Books, *The Giant Airships*. Time-Life Books, 1980.
- Cessna Pilot Center, *Manual of Flight*. 1987.
- Connors, John F., *Albatros Fighters in Action*. Squadron/Signal Publications, 1981.
- Cooper, Malcolm, *The Birth of Independent Air Power: British Air Policy in the First World War*. Unwin Hyman, 1990. (A very scholarly, but shocking account of the R.F.C./ R.A.F. Recommended to serious enthusiasts.)
- Fonck, Rene, *Ace of Aces*. Doubleday, 1967.
- Fredette, Raymond, *The Sky On Fire, The First Battle of Britain 1917-1918*. Harcourt Brace Jovanovich, 1976. (An excellent book)
- Fuller, J.F.C., *Decisive Battles of the U.S.A.* Thomas Yoseloff Inc, 1942.
- Gray, Peter and Owen Thetford, *German Aircraft of the First World War*. N&A publishing Co., 1987.
- Grey, C.G., ed., *Jane's all the world's Aircraft 1919*. Arco Publishing Company, 1919.
- Horne, Alistar, *The Price of Glory*. Penguin Books, 1982. (It details Verdun, highly recommended. A book you won't be able to put down.)
- Immelmann, Franz, *Immelmann, the Eagle of Lille*. Greenhill Books, 1990.
- Johnson, Johnnie, *The Story of Air Fighting*. Arrow Books, 1985.
- Jones, Ira, *King of the Air Fighters*. Greenhill Press. (A lively account of Mick Mannock's career.)
- Keegan, John, *The Illustrated Face of Battle*. Viking Press, 1988.
- Kershaw, Andrew, ed., *The First War Planes*. BPC Publishing LTD., 1971.
- Kershner, William K., *The Student Pilot's Flight Manual*. The Iowa State University Press, 1979.
- Lewis, Cecil, *Sagittarius Rising*. Giniger Books, 1963. (It reads like poetry, a must for anyone interested in the period.)
- Livesey, Anthony, *Great Battles of World War I*. Macmillan Publishing Company, 1989. (A great book! Highly recommended.)
- McCudden, James T.B., *Flying Fury*. Doubleday, 1968. (An honest and forthright account. Highly recommended.)
- McEntee, Girard L, *Military History of the World War*. Scribner, 1937.
- Mitchell, William A., *Outlines of the World's Military History*. Military Service Publishing Co., 1931. (A good overview of the Great War)
- Musciano, Walter A., Lt. Werner Voss. Hobby Helpers Publishers, 1962.
- Nowarra, H.J., Brown, Kimbrough S., *von Richthofen and the Flying Circus*. Harleyford Publications, 1964.
- Phelan, Joseph A., *Heroes and Aeroplanes of the Great War, 1914-1918*. Grosset & Dunlap, 1966. (Great illustrations.)

SELECTED BIBLIOGRAPHY

- Richthofen, Manfred Freiherr von, *The Red Air Fighter*. Arno Press, 1972.
- Rimell, Raymond Laurence, *The Royal Flying Corps in World War One*. Arms and Armour Press, 1985.
- Rimell, Raymond Laurence, *The German Army Air Service in World War One*. Arms and Armour Press, 1985.
- Rimell, Raymond Laurence, *Air War over Great Britain*. Arms and Armour Press, 1987. (All of Mr. Rimell's books are highly recommended.)
- Robertson, Bruce, Editor, *Air Aces of the 1914-1918 War*. Harleyford Publications, 1964. (A good overview of the Aces.)
- Smythe, Donald, *Pershing, General of the Armies*. Indiana University Press, 1986.
- Spick, Mike, *The Ace Factor, Air Combat and the Role of Situational Awareness*. Naval Institute Press, 1988. (A good study on tactics.)
- Stark, Rudolph, *Wings of War, A German Airman's Diary of the Last Year of the Great War*. Greenhill Press, 1988.
- Travers, Tim, *The Killing Ground, The British Army, the Western Front and the Emergence of Modern Warfare, 1900-1918*. Unwin Hyman, 1990. (A rather disturbing study on the British Army. Not light reading, but well worth the effort.)
- Udet, Ernst, *Ace of the Iron Cross*. Arco Publishing Co., 1981. (One of the best personal accounts of the war.)
- Werner, Johannes, *Knight of Germany*. Arno Press, 1972.

Windsock Data Files

- Bruce, J. M., *Morane Saulnier Type L*. Albatros Productions LTD., 1989.
- Bruce, J. M., *RAF BE2e*. Albatros Productions LTD., 1989.
- Grosz, P. M., *Fokker E.III*. Albatros Productions LTD., 1989.
- Grosz, P.M. *Pfalz D. III*. Albatros Productions LTD., 1990.

Periodicals

- Cross & Crockade Journal*. Vol. 1-3, 7, 10-26, 1960- 1985, Society of World One Aviation Historians, Whittier California. (Full of fascinating articles, tidbits and book reviews.)
- Over the Front*. Vol. 4, No. 3-4, Vol. 5, 1-2, 1989-90, League of WWI Aero Historians, Plano, Tx. (The best journal for WWI aviation today. Highly recommended.)
- Profile Publications*, No. 9, 13, 17, 25, 26, 43, 49, 73, 91, 127, 133, 139, 163, 187, 200, Profile Publications Ltd., Surrey, England. (Detailed pamphlets on WWI aircraft.)
- Windsock International*, Vol. 5, Nos. 3-4, 1989; Vol. 6, Nos. 1-3, 1990, Albatros, Berkhamsted, Herts, England. (A marvelous magazine for modelers.)
- World War One Aero' The Journal of the Early Aeroplane*. No. 108-127, 1986-1990, World War One Aeroplanes Inc., Poughkeepsie, New York. (An excellent source for technical details for the aircraft of the period.)

Movies

The Blue Max, directed by John Guillermin. Twentieth Century Fox, 1966. Color. Stars George Peppard and James Mason. (A very entertaining, visually rich film. It is about one man's quest to receive the highest military honor Germany can bestow).

Hell's Angels, directed by Howard Hughes. Black and White. (This is a great film. The cinematography is incredible. It has the best air combat footage of the movies listed here. The stunts are all real, done with the actual aircraft of the war.)

Paths of Glory, directed by Stanley Kubrick. Harris Kubrick Pictures, 1957. Black and White. Stars Kirk Douglas. (An excellent, powerful movie. Studies the politics of command in the French Army.)

The Red Baron, produced by Halbgebauer Productions. Questar/Travel Network, 1988. Documentary.

Wings, directed by William Wellman. Paramount, 1927. Black and White, silent. Stars Clara Bow. (The first movie to win an Academy Award for Best Picture. This is the movie that others copied for a decade. Film footage from *Wings* crops-up in dozens of World War One movies made during the 1930's and early 1940's.)

GLOSSARY

Ace An aviator with at least 5 victories.

Aerodrome An airfield, generally makeshift or temporary.

Ailerons The movable surfaces on an aircraft's wings that control its roll.

Alley-man Derived from the French word for German, this was a British and American term for a German.

Allies The French, British, American, Russian and Italian coalition which was allied against the Central Powers.

Archie Pilot's slang for anti-aircraft fire.

As des As French term for the top ace. It literally means ace of aces.

Bloody April A name given to April of 1917 when the German Albatros D.III inflicted huge casualties on the Allied aircraft.

Blue Max Common English term for Germany's highest military honor, the Pour Le Merite award.

Bosche French slang for a German.

Bounce A slang term meaning to surprise an enemy aircraft.

Brisfit Nickname of the Bristol Fighter.

Central Powers The German and Austro-Hungarian Alliance which was allied against the Allies.

Crate Slang for aircraft.

Deflection angle The angle a target is in relation to the aircraft shooting at it.

Deflector gear Invented by Roland Garros as a means to allow a machine gun to fire through the arc of a propeller. Deflector gear was nothing more than a steel wedge mounted on the propeller blades to deflect any bullets that would have otherwise torn the blades off.

Dirigible A gas-filled airship with an internal framework or skeleton.

Dogfight Multiple aircraft involved in a melee. Sometimes more than 50 were involved in such battles.

Doppledecker German for biplane.

Dreidecker German for triplane, as in "Fokker Dreidecker I" or "Fokker Dr.I" for short.

Eagle of the Lille Nickname of Max Immelmann.

Eindecker German for monoplane. It is used to describe the Fokker E series.

Elevators The movable surfaces on an aircraft's tail assembly that control pitch.

Escadrille French term for squadron. Usually composed of 12 planes.

Fee Nickname for the F.E.2b. A British two-seat pusher biplane first used as a fighter, then later as night bomber.

Flak Antiaircraft fire.

Flamed A verb used to describe a downed plane.

Flying Circus Nickname applied to Richthofen's Jagdgeschwader because the unit lived out of tents, moved around a lot, and painted their planes in extravagant colors.

Fokker Scourge Took place between 1915-16 when the Fokker Eindeckers cleared the skies of Allied aircraft. Ended by summer of 1916.

Frog, Froggies British term for their French allies.

Geschwader Short for Jagdgeschwader.

Grid British expression for an aircraft.

Hate, Morning and Evening British expression for German artillery bombardments and anti-aircraft fire.

Hun Slang for a German.

Hunland German-held territory.

Jagdgeschwader It literally means "hunting wing." It is a large German unit of about 50 scouts composed of 3 to 4 Jagdstaffeln.

Jagdstaffel Literally "hunting group," it is the German equivalent of the British Squadron. Each Jagdstaffel was equipped with a maximum of 12 scouts.

Jasta Short for Jagdstaffel.

J.G. Short for Jagdgeschwader.

Kill A downed aircraft credited to a pilot.

Lead Placing a machine gun's crosshairs in front of a target in order to compensate for the speed of the target and the angle it is at in relation to the gun.

Luftstreitkräfte Official German name for the German Imperial Air Service.

No-Man's Land The space between the German and Allied front line trenches. It was pocked and scarred and destroyed by the fighting.

Observer The gunner in all two-seaters.

Piste French for landing field, used by American pilots.

Pitch The up or down rotation of an aircraft controlled by the elevators.

Quirk Nickname of the B.E.2c British observation aircraft.



GLOSSARY

R.A.F. Abbreviation for the British Royal Air Force. Founded on April 1, 1918 from the combined R.F.C. and R.N.A.S.

Reconnaissance Scouting the enemy's strength, location and if possible, his intentions.

Red Baron Nickname of Manfred von Richthofen.

Red Devil/ Le Diable Rouge Allied nickname for Manfred von Richthofen.

Roll The rotation of an aircraft about the axis running from nose to tail. It is controlled by the ailerons.

R.F.C. Abbreviation for the British Royal Flying Corps. It later became the Royal Air Force.

R.N.A.S. Abbreviation for the British Royal Navy Air Service. It was incorporated into the R.A.F. on April 1, 1918.

Rudder The fin on the tail of an aircraft that controls its yaw.

Sardine Can Nickname of the Fokker Eindecker.

Schlachtstaffel German ground attack squadron. It literally means "battle group."

Scout Usually a single-seat aircraft. Designed specifically to fight other aircraft. Called fighters or interceptors today.

Sortie A mission flown by an airplane.

Spad Acronym for the French Societe Pour l'Aviation et ses Derives. A French aviation company responsible for building the Spad VII and XIII among other aircraft.

Spinning Incinerator Slang for the Airco D.H. 2. Named this since its engines were so unreliable as well as the plane's habit of falling into spins suddenly.

Squadron Standard British and American tactical aircraft unit. Composed of between 12 and 18 planes.

Staffel Short for Jagdstaffel.

Strafe To shoot at ground targets with airborne machine guns.

Stick The control column in an aircraft's cockpit used to operate the ailerons and elevators.

Stunt Merchant 60 Squadron's nickname for Billy Bishop.

Synchroniser gear A timing device which allowed the machine gun to fire between moving propeller blades without ever hitting them. Invented by Anthony Fokker, it revolutionized aerial warfare.

Tripehound Nickname for the Sopwith Triplane.

Triple Entente The French, British and Russian pre-war Alliance.

Two-Seater Generic term applied to aircraft with a crew of two, which were generally observation aircraft.

Victory The shooting down of an enemy aircraft.

Yaw The rotation of the aircraft in the horizontal plane. It is controlled by the rudder.