

GINEMAWARE

P R E S E N T S

WINGS





INSTRUCTION MANUAL

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INTRODUCTION

Thank you for purchasing *Wings*, Cinemaware's first Personal Combat Simulator. Strictly speaking, *Wings* is not an interactive movie, nor could it be called a military flight simulator, and yet it combines elements of both to create a unique interactive experience.

Wings is not a game about winning or losing. In fact, there is no way to lose the game, and the only winner is the player with enough skill and determination to face over 230 different missions and see the war through to its end. It isn't easy. You find new challenges and surprises at every step, and your opponents' skills and aircraft improve dramatically as the war progresses.

The game is historically accurate wherever possible. The Das Rittmeister character you meet at the end of 1916 is fictionalized, as well as the 56th Aerosquadron itself, which represents a typical English, French, or American fighter unit. The real 56th squadron was an elite unit made up of the top pilots in England. They traded flight tactics and tested the new S.E.5's before returning to their units to share their newly acquired knowledge.

Welcome to World War One. It's March 2, 1916. You're about to find out what it was really like to be an Allied pilot in the Great War. Good luck, Lieutenant.

BEFORE LOADING THE GAME

Before loading *Wings*, make backup copies of both disks (refer to your computer owner's manual for instructions on copying disks). Make sure the copies are named "Reel 1" and "Reel 2" and not "Copy of Reel 1" or "Copy of Reel 2." Put the original game disks in a safe place and play the game with the copies.

Caution: Do not write protect Reel 2, as games are saved to this disk.


Hard Disk Installation: You can install *Wings* on your hard disk. On Reel 1 is a file named READ_ME.INSTALL that explains the procedure.

LOADING INSTRUCTIONS

Connect a Joystick and turn on your monitor. Insert Reel 1 into drive DF0 (if you have two drives, insert Reel 2 into your second disk drive) and turn on computer (Amiga 1000 users must use Kickstart 1.2 or later in drive DF0 before inserting Reel 1). If you're using only one disk drive, follow the prompts for switching disks. Once the game is loaded, the title sequence begins. You can bypass this by pressing the Joystick fire button.

FLIGHT SCHOOL

If you are playing *Wings* for the first time, you will go directly to Flight School after the title sequence.

FLIGHT SCHOOL	
Add Pilot	1. Waldo P. Barnstormer 
Delete Pilot	2.
View Pilot	3.
Earn Wings	4.
Join Squadron	5.
Quit/Exit	6.

Select Pilot	8.
ESC to cancel	9.
	10.

The menu selections let you Add Pilot, Delete Pilot, View Pilot, Earn Wings, Join Squadron, and Quit/Exit. The options available at any given time are highlighted.

One pilot, Waldo P. Barnstormer, has already earned his wings when you arrive at Flight School. You may use him as your alter-ego if you want to jump right into the game. Or, create a new pilot and go through the pilot





training session to earn your own wings.

ADD PILOT Select this option and the Add Pilot screen appears (you can add up to 10 pilots). Type in your pilot's name and press RETURN (2nd Lieutenant is your first rank).





The box at the bottom of the screen lets you set your pilot's abilities. Use the Joystick to click on the bars (or use the up, down, left, and right arrow keys) to change the ability levels. The bar color changes from red (low) to yellow (adequate) to green (good), depending on the level of ability assigned.

The Ability Points indicator at the top of the box shows how many points you can assign. When you create a new pilot, he has 40 points assigned to each ability, plus 40 more you can distribute between his abilities. This is the only time you can actively adjust

NAME: _____	RANK: _____	VICTORIES
• MISSIONS:	• DOGFIGHTS: /	
• DITCH/DOWN:	• BOMBING: /	
• REPRIMANDS:	• STRAFING: /	

• CONFIRMED KILLS:	   	

• FLYING: Sitting Duck	• SHOOTING: Pea Shooter	
• MECH: Butterfingers	• STAMINA: Door Mat	

ABILITY POINTS: 40		
FLYING ABILITY		
SHOOTING ABILITY		
MECH APTITUDE		
STAMINA		
USE <input type="checkbox"/> OR <input type="checkbox"/> TO ALTER RATING		<input type="button" value="ESC WHEN DONE"/>

these numbers. During the game, these abilities increase or decrease according to your performance in battle.

After making your selections, press ESC to go back to the Flight School screen.

DELETE PILOT Select this option to remove a pilot from the Flight School roster.

VIEW PILOT Select this option to see any Flight School pilot's statistics. You'll notice that most of these categories have no figures while you're in school. Later, after you've seen a few battles, you'll learn what these mean.

EARN WINGS Select this option to go to Flight School. You must pass training in order to join the 56th Aerosquadron. You'll be assigned training missions (strafing, bombing, or flying), which are excellent practice for the real thing. Once you succeed at one of the training missions, you earn your wings and are eligible to Join Squadron.

JOIN SQUADRON Select this option after earning your wings to join the 56th Aerosquadron. Make this selection, then choose which qualified pilot you wish to be in the game (only one pilot at a time can join the 56th). You must give a password to be allowed into the 56th Aerosquadron, and you can find that password in your Pilot's Briefing Manual. You'll be instructed where to look (ignore headings and quotes; the password is in the main body of the text).

After you give the correct password, you receive a briefing from your Commanding Officer, Col. Charles Farrah, at the 56th headquarters. Then the Squadron Roster appears, where you see all the members of the 56th listed by rank, the number of missions they've flown, and enemy planes they've downed. Select CONTINUE GAME. A company journal appears – your diary of the war. Pages turn automatically to the current day's entry – read it carefully, as it often has vital information about your upcoming mission. Press FIRE to go to your first mission.

QUIT/EXIT If you haven't joined the 56th, this ends the game session. If you have a pilot in the 56th, QUIT/EXIT takes you to the Main Menu.

MAIN MENU

If you have a saved game, the Main Menu appears after the title sequence. You can also access this menu from other points in the game.

The Main Menu has five selections: REVIEW PILOTS, CONTINUE GAME, NEW GAME, FLIGHT SCHOOL, EXIT/SAVE. Use the Joystick to move the cursor arrow to the desired selection; press FIRE to select.

REVIEW PILOTS Select this option to view the Squadron Roster. This lists all the members of the 56th by rank, number of missions they've flown, and enemy planes they've downed. From this screen you can select Current Pilot (to see your statistics – see *RATINGS* on page 11 for details), Memorial (to see the list of the twenty best *Wings* players), or Exit (to return to the Main Menu).

CONTINUE GAME Anytime the game takes you to the Main Menu, select this option to resume playing the current game.

NEW GAME Select this option and you see the prompt DELETE GAME IN PROGRESS? Select YES to start a new game. If you have a game in progress that you don't want to lose select NO, then CONTINUE GAME (or EXIT/SAVE to save the game).

FLIGHT SCHOOL Select this option to create and train pilots.

EXIT/SAVE Select this option to end the current session and save the game. Only one game at a time can be saved on Reel 2. If you wish to save more than one game, make copies of Reel 2 and use a different copy for each game.

AERIAL COMBAT MISSIONS

In any aerial combat mission, your flying skill is of paramount importance. You must be able to evade enemy fire, maneuver to get enemy targets in your sights, and occasionally land a badly crippled airplane without crashing. Enemy planes and the baskets of enemy observation balloons are easily distinguished by their red coloring; Allied aircraft are light brown.

If you can see bushes, you are flying very low. To maintain level flight, keep the horizon line inside your circular gun sight. If you stall (your engine coughs and you start to dive), don't panic. Release the stick for a moment to regain lost airspeed, then ease it back to return to level flight.

Missions aren't over until all enemy planes and balloons have been shot down (make sure your enemy actually hits the ground; a damaged plane *can* recover and come back to attack you). You can ditch (land your plane) to make a hasty exit from any aerial combat mission. Of course this is frowned on by Wing Headquarters.

Look around by pressing these keys on the number pad: 8 – forward; 4 – left; 6 – right; 2 – back. Press FIRE to shoot your machine guns.

Note: When you're facing forward, watch for your pilot's head to turn left or right; that is the direction of the nearest enemy plane.

Before each aerial combat mission you receive mission orders that include the date, the type of mission, and who (if anyone) will be flying with you (including how many missions each of you has flown and how many confirmed kills you've made).

After you get your mission orders and take off (click on FLY), a "movie card" appears. Important information about the upcoming battle is included in these messages.

There are four types of aerial combat missions.

PATROL Destroy all enemy aircraft (you may meet anywhere from 1 to 10). If any enemy planes get by you and your comrades, you fail your mission.

BALLOON BUSTING Destroy all enemy balloons (1 – 5) and any planes protecting them. You will also be under anti-aircraft fire from the ground.

ESCORT Ensure the safety of the bomber or reconnaissance plane you are assigned to escort by destroying all enemy aircraft. If you lose the plane you're escorting, you fail your mission.

PROTECT Destroy all enemy planes and ensure the safety of the Allied base or balloons you are assigned to protect. If the base is hit or balloons destroyed, you fail your mission.

At the end of each aerial combat mission you receive a Post Flight Log. This mission report tells you whether your mission was a success or failure, the names of all 56th pilots involved, their status (okay, downed, etc.), and how many planes and/or balloons each pilot shot down.

If you are unlucky enough to go down and can't make a smooth landing, your pilot will be killed. This means you must go to Flight School and create a new persona to continue the war.

STRAFING MISSIONS

In any strafing mission, your shooting skill is vital. Press FIRE to shoot your machine guns and watch slightly ahead of your plane for the flashing streaks where the bullets hit the ground. Some targets require several hits to finish them off. You must be able to hit enemy trucks, trains, tents, infantrymen, etc., and avoid hitting ambulances and red-cross tents. You must also avoid being hit by ground fire. You can't die in a strafing mission, but you can be shot down by repeated machine-gun hits or a single hit from a large anti-aircraft gun.

Before each strafing mission you receive a set of mission orders that include the date, the type of mission (your primary target), any secondary targets, and what to avoid hitting. In order to succeed in a strafing mission, you must destroy 50% or more of your primary objective targets (in a train-strafing mission, you must destroy the engine, as well as 50% of the cars). Destroying secondary targets improves your pilot's ratings (see *RATINGS*, page 11).

At the end of each strafing mission, the Post Flight Log tells you whether your mission was a success or failure, how many rounds of ammunition you shot, what percentage of your shots hit a target, and your status. It also tells you how many targets were part of your primary and secondary objectives, how many of those targets you destroyed, and what percentage of the targets you destroyed.

BOMBING MISSIONS

Your first bombing mission comes later in the game, as bombs were in short supply at the beginning of the war. When you do get bombs, good aim is crucial. You must be able to hit enemy targets and avoid hitting hospitals, churches, schools, and ambulances (all marked by a red cross). You can't die in a bombing mission, but you can be shot down by direct hits from anti-aircraft fire (close shell bursts rock your plane and make it uncontrollable for several seconds).

You can see how many bombs you're carrying (maximum of 10) by looking at the underside of your wings. Press **FIRE** to shoot your machine guns. To drop a bomb, press **FIRE** while simultaneously tapping back on the Joystick.

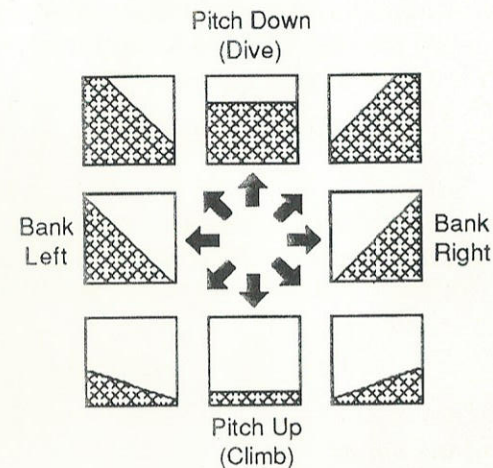
Before each bombing mission you receive a set of mission orders that include the date, the type of mission (your primary target), any secondary targets, and what to avoid hitting.

After you see the mission orders, a reconnaissance photograph of the target area is displayed. On the photograph you'll see your primary targets circled in red (if your primary target is a moving target such as a submarine or a train, you won't see a recon photo). In order to succeed in a bombing mission, you must destroy all of your primary objective targets. Destroying secondary targets improves your pilot's ratings (see *RATINGS*, page 11).

At the end of each bombing mission, the Post Flight Log tells you whether your mission was a success or failure, how many bombs you carried, how many bombs you dropped, how many targets were part of your primary and secondary objectives, and how many of those targets you destroyed.

AERIAL COMBAT FLYING

All functions of flying your plane in *Wings* are controlled by the Joystick. Pushing the Joystick forward or pulling it back operates the elevators (located on the tail of the plane) and points the nose of the plane down (diving) or up (climbing). Airspeed increases are accomplished by diving. Pushing the Joystick left or right operates the ailerons (the wing flaps) and causes one wing to drop and the other to lift, enabling rolls and turns.



There are three methods of control, from which all aerobatics maneuvers are derived: roll, pitch, and yaw. Think of your plane as having three axes. The first axis runs from the nose to the tail, and rotation around this axis is called a roll (turning over). The second axis runs from wingtip to wingtip and rotation around it is called pitch (diving and climbing). The third axis passes vertically through the center of the plane and rotation around it is called yaw (turning from left or right).

ROLL To execute a roll, push the Joystick all the way to the left or right and hold it. Level off by centering the Joystick when the horizon is level.

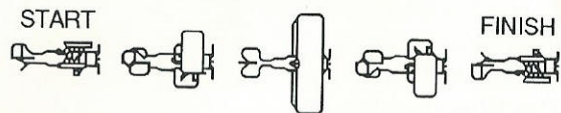
PITCH To climb from level flight, pull the Joystick back. Listen to the engine sounds and you'll notice that the engine slows down as you climb. If you climb too steeply, you lose too much airspeed and stall the plane. Push the Joystick forward to dive, which increases your speed and can correct a stall if done in time.

YAW To turn, push the Joystick left or right to bank the plane, then center the Joystick. The plane continues in a full turn. To stop turning, level the plane.

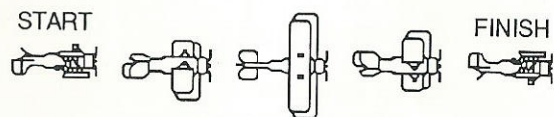
On the next few pages are several aerobatic maneuvers (including the famous Immelmann Turn) you can perform in your S.E.5. A little fancy wing-work can help you evade the Huns in a dogfight; but, don't forget, the object here is to shoot your target and get out alive!

Caution: When doing aerobatics of any sort, be sure you have enough altitude to complete the maneuver without hitting the ground! Loops are especially dangerous in World War I aircraft, as you always come out of a loop at a lower altitude than when you begin it.

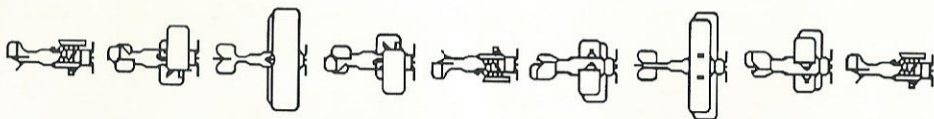
ONE-HALF ROLL TO INVERTED FLIGHT From upright level flight, push the Joystick all the way to the right (to the left, if you want to roll left). As you approach upside-down position, center the Joystick. When you're in the inverted flight position, keep in mind that pulling back on the Joystick noses the plane toward the ground and pushing forward pitches it skyward.



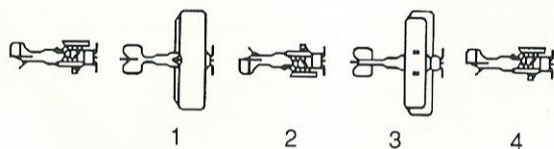
ONE-HALF ROLL FROM INVERTED FLIGHT From inverted level flight, push the Joystick all the way to the right (to the left, if you want to roll left). As you approach upright position, center the stick.



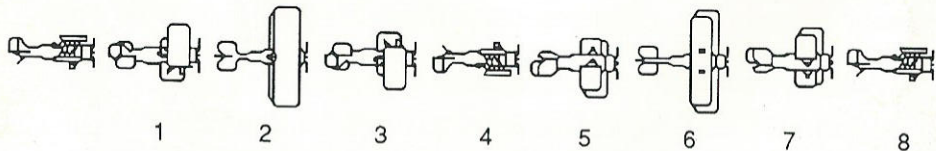
SLOW ROLL From upright level flight, push the Joystick all the way to the right (to the left, if you want to roll left). To stop rolling, center the stick.



FOUR-POINT HESITATION ROLL Push the Joystick to the right to begin the roll. Briefly center the stick at the 1/4, 1/2, and 3/4 points of this roll.

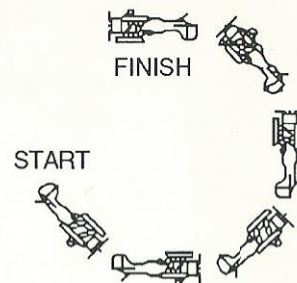


EIGHT-POINT HESITATION ROLL Push the Joystick to the right to begin the roll. Briefly center the stick at the 1/8, 1/4, 3/8, 1/2, 5/8, 3/4, and 7/8 points of this roll.



ONE-HALF LOOP TO INVERTED FLIGHT

Start at a reasonably high altitude and dive to increase airspeed. At the bottom of your dive, pull sharply back on the stick until you loop into inverted flight (if you stall on your climb, you didn't dive long enough to adequately increase your airspeed). Center the stick to level out.



ONE-HALF LOOP FROM INVERTED FLIGHT

From inverted flight (at a reasonably high altitude), pull back on the stick until you loop into upright flight. Center the stick to level out.

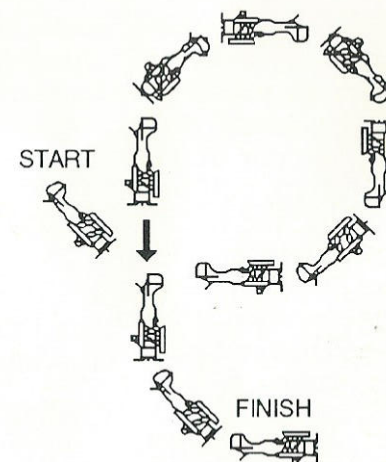


ADVANCED MANEUVERS ATTEMPT ONLY FROM HIGH ALTITUDES

INSIDE LOOP Start at a reasonably high altitude and dive to increase airspeed.

At the bottom of your dive, pull sharply back on the stick to climb and loop.

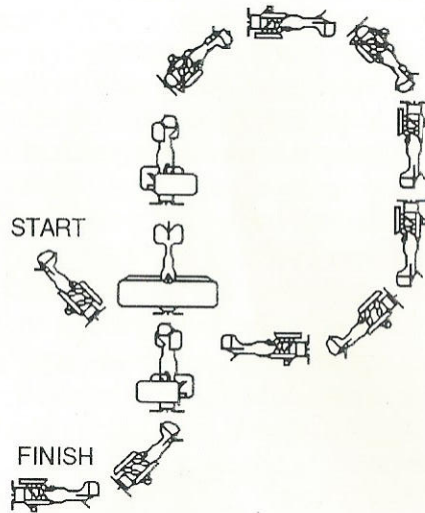
Continue holding back on the Joystick all the way through the loop, until you finish in upright level flight.



ONE-HALF CUBAN 8 Start at a reasonably high altitude and dive to increase airspeed.

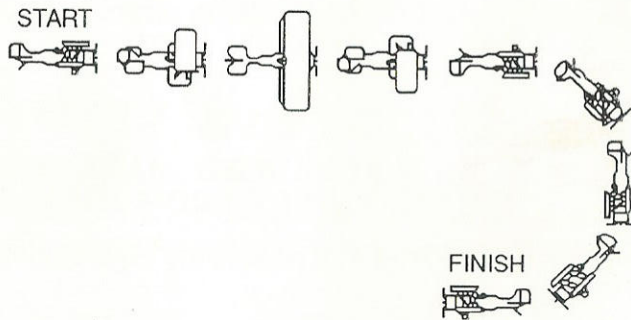
At the bottom of your dive, pull sharply back on the stick to climb and loop. Continue holding back on the stick through the top of the loop until you are nosing directly down.

At the 3/4 point of the loop, center the stick. Push right on the stick to do a one-half roll to upright position; center stick to stop roll. As you come upright, pull back on the stick until you're in level horizontal flight.



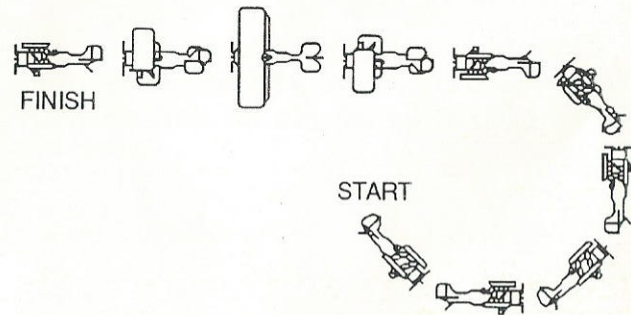
SPLIT S Do a one-half roll right to inverted position.

Pull the stick back to pitch downward, until you level out when you reach horizontal position.



IMMELMANN TURN Start at a high altitude. Dive to increase airspeed. At the bottom of your dive, pull back on the stick to climb and loop until you are in inverted flight. Then release the stick.

Roll right to upright flight and center the stick to stop the roll.



RATINGS

To review your status in Wings, select REVIEW PILOTS from the Main Menu, then select Current Pilot from the Squadron Roster screen.

The status screen is divided into four sections. The first section shows

NAME: <u>Waldo P. Barnstormer</u>		RANK: <u>2nd Lieutenant</u>	
		VICTORIES	
• MISSIONS:	12	• DOGFIGHTS:	3/4
• DITCH/DOWN:	1	• BOMBING:	4/5
• REPRIMANDS:	0	• STRAFING:	1/3
• CONFIRMED KILLS: 2 1 0 4			
• FLYING: Clay Pigeon I		• SHOOTING: Marksman II	
• MECH: Apprentice I		• STAMINA: Lead Belly I	
HONORS			
MILITARY CROSS	CROIX DE GUERRE	DIST. SERV. ORDER	LEGION D'HONNEUR
VICTORIA CROSS			VICTORIA CROSS

your name; rank; number of missions; number of times you ditched or were downed; number of reprimands you've received; and number of times you were victorious in each type of mission (dogfights, bombing raids, and strafing runs).

The second section shows your confirmed kills, broken down by monoplanes, biplanes, triplanes, (five planes and you're an Ace!) and balloons.

The third section lists your personal statistics: flying ability, mechanical aptitude, shooting ability, and stamina. You set these levels when you create your pilot, then your performance in battle affects them from that point.

Successful missions affect all four of these abilities favorably; unsuccessful missions affect them all negatively. The amount of effect is determined by the mission's difficulty level. Successful missions positively affect your entire squadron. Repeated failure has a negative effect on the squadron's morale.

FLYING ABILITY The general maneuverability of your airplane (how fast you can fly and turn) is affected by your flying ability.

MECHANICAL APTITUDE This rating affects how well your plane holds up in the air, whether or not the guns jam, and how much functionality and control you have if you're hit.

SHOOTING ABILITY The level of this ability affects the number of hits you need in order to take out enemy aircraft. It also determines the accuracy and range of your machine guns.

STAMINA The level of stamina determines how well you're able to survive crashes. Rookie pilots are usually killed instantly in mid-air collisions, while pilots with high stamina may get a chance to land.

Certain activities in successful missions can favorably affect particular ratings. In a strafing mission, if you hit the required number of primary targets, then take out a majority of your secondary targets, your shooting ability increases. Hitting *all* the supply areas in a successful strafing mission also adds more to your shooting ability. If you sustain no hits to your plane during a successful strafing mission, you get a significant increase in mechanical aptitude. The more hits you sustain, the smaller the increase. Getting shot down results in a decrease in mechanical aptitude (even in an otherwise successful mission).

After you hit your primary targets in a bombing mission, you get extra flying ability for success at hitting secondary targets. For example, if you had 6 bombs and hit 2 primary targets, then hit 4 secondary targets, you'd get a significant flying ability increase. If you avoid being hit by anti-aircraft flak during a successful bombing mission, you get extra stamina.

When your levels of flying ability, mechanical aptitude, shooting ability, and stamina change, the "nickname" you get for each category changes on your status screen. The chart below shows some of the changes you may see, starting with the lowest possible rating.

<u>FLYING</u>	<u>MECHANICAL</u>	<u>SHOOTING</u>	<u>STAMINA</u>
Sitting Duck	Butterfingers	Pea Shooter	Door Mat
Clay Pigeon I	Apprentice I	Marksman I	Lead Belly I
Clay Pigeon II	Apprentice II	Marksman II	Lead Belly II
Sky Falcon I	Grease Monkey I	Sharpshooter I	Granite Gut I
?	?	?	?
?	?	?	?
?	?	?	?
?	?	?	?

When you win a medal, it appears in its appropriate niche in the bottom window. Medals and promotions are awarded based on a pilot's successes and the mood at Wing Headquarters. Mood is affected by how the squadron does as a unit. Keep this in mind the next time one of your buddies sweeps in and steals a hard-earned kill just as you were about to deliver the finishing blow.

WINNING AND LOSING

You can't really lose the *game*, but you can lose a pilot. Naturally, if your pilot dies, he's out of the picture. If you fail at three missions in a row, you receive a severe warning from your C. O. You get a second warning with your fourth consecutive failure, and you're thrown out of the squadron with five failures in a row! Just one success in between these failures will keep you in the air.

Your pilot can also be given a dishonorable discharge for behavior unbecoming an officer of the 56th Aerosquadron. Unacceptable behavior includes shooting down one of your own planes or balloons, or shooting any object marked with a red cross (ambulances, hospitals, schools, and churches). Each time you do one of these dastardly deeds, you get a reprimand. Three reprimands and you're out!

You win *Wings* by surviving until Armistice Day. The last mission is on November 10, 1918. When you make it through that mission, you've made it through the war and to victory!

STRATEGY AND TACTICS

AERIAL COMBAT MISSIONS At the beginning of a mission where the enemy is in front, circle around and attack him from behind. When your group is outnumbered you can't afford this luxury, because you risk losing your wingmen who are counting on you for cover. In this situation, attack quickly, splitting the opposition, then dive out before you sustain too much damage. This tactic can save your buddies' lives by diverting enemy fire. And on the really tough missions, you're going to need all the help you can get up there!

Use the numeric keypad to look around. Don't let the enemy surprise you!

If you see an enemy pilot in front of you, don't try to fly straight at him. Figure out which direction he's headed and fly to where you think he's going.

To avoid enemy fire during a dogfight, keep dodging, don't fly at a constant altitude, and, if you get hit, dive or climb immediately.

There are three ways to avoid Archie (anti-aircraft) fire when going after an enemy balloon: fly over the balloon and dive straight down on top of it (this strategy was used by many WWI pilots); fly around the shell bursts and attack it from the rear; or strafe the anti-aircraft gun and destroy it (dive straight down at the beginning of a balloon busting mission and you'll usually find the anti-aircraft gun).

Be careful when attacking an enemy plane head-on, especially when it's above you. A well placed burst could send him spiraling out of control – and right into your flight path!

When following a banking target, lead him with your shots.

Don't shoot Allied aircraft or Allied anti-aircraft guns!

STRAFING AND BOMBING MISSIONS When you receive mission orders, your mission objective is the primary target you must destroy.

STRAFING MISSIONS Keep moving and try to hit the infantry before they crouch down to shoot. This helps keep your plane in one piece.

If you don't have time to take out the anti-aircraft gun, watch where the shell bursts are hitting and fly around that spot. It only takes one hit from an Archie to end your mission in a hurry.

When you're strafing infantry, get them before they can escape to the right or left side of the screen.

BOMBING MISSIONS Keep moving to avoid the anti-aircraft gun.

When you're ready to drop your bombs, wait for the guns to fire; then, move in quickly and release your deadly cargo before they can fire again.

When enemy planes come in, quickly take them out (if you can't avoid them). They'll interfere with you and keep you from getting to your target.