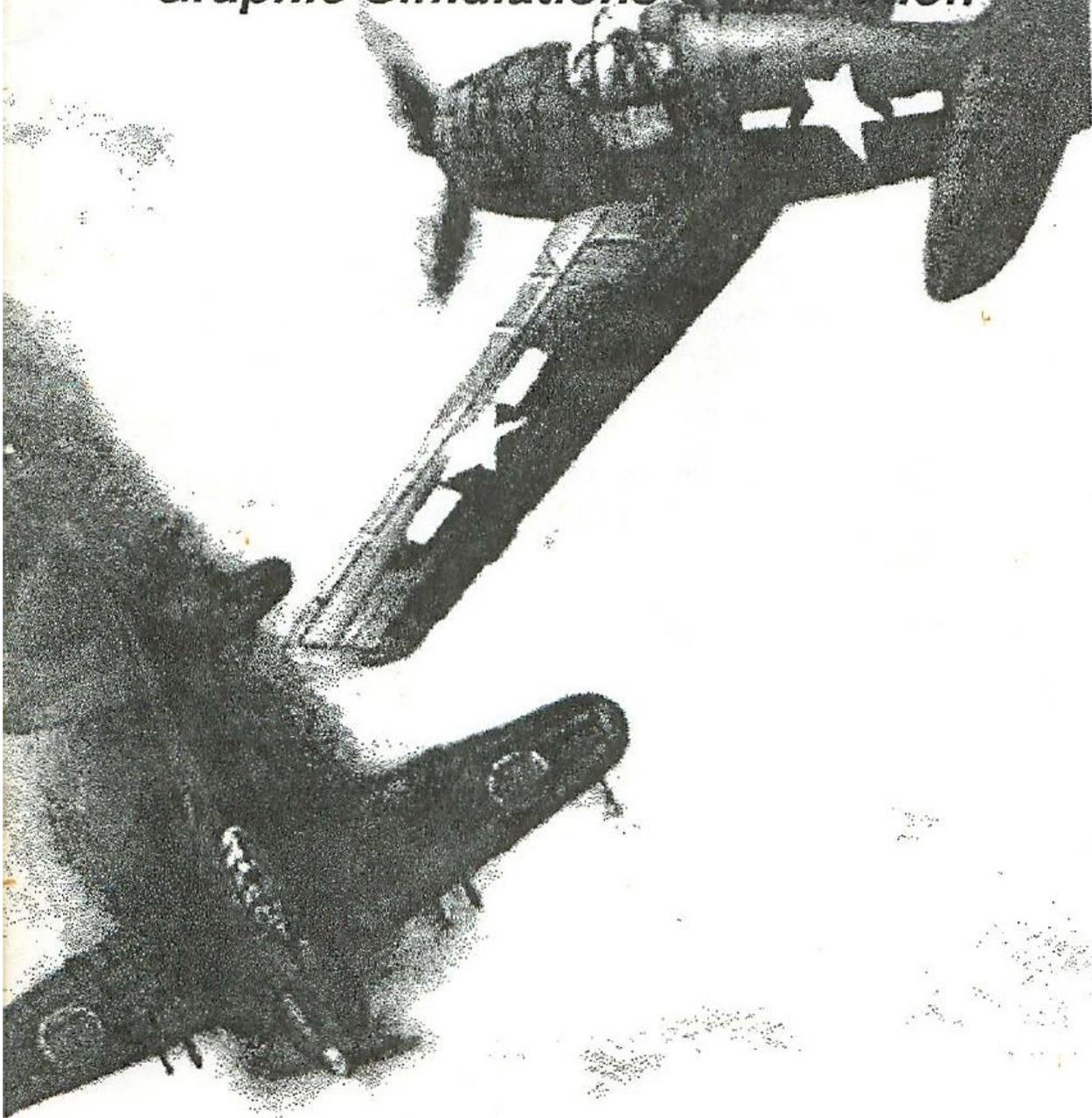


HELLCATS OVER THE PACIFIC

Version 1.0 for Macintosh™
Graphic Simulations Corporation



Hellcats Over the Pacific User's Manual

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Special thanks to:

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Introduction

HELLCATS OVER THE PACIFIC is a flight simulation of the Navy model F6F Hellcat airplane built by the Grumman Corporation of Bethpage, NY.

The Hellcat was first introduced in early fall, 1943 as a replacement and upgrade for the widely used F4F Wildcat. The Hellcat was a bigger and faster airplane in every respect to its predecessor.

The most common configuration of Hellcat included armament of six Browning M-2 .50 cal. machine guns. Power was provided by a Pratt & Whitney R-2800-8 Double Wasp rotary engine producing 2,000 horsepower and a top speed of 275 kts. at sea level.

With its improved speed and weaponry, the Hellcat compiled a 11-1 kill ratio during its service in the Pacific theater. For its 24 months of WWII service, the airplane was credited with over 5,000 enemy kills.

Hellcats Over the Pacific attempts to give you a feel for what it must have been like to pilot an F6F. The setting consists of the Solomon Island chain and the Pacific waters surrounding them. Your missions take place from aboard fleet carriers and from various land bases located throughout the Solomons. Your fate is in your own hands.

2 HELLCATS USER MANUAL

System Requirements

HELLCATS requires 2mb of RAM, system version 6.0 or greater, and a Macintosh with a 68020 processor or better. Some Mac's that qualify are:
Any Mac II, LC, SE30, Classic II, Powerbooks 140 and 170, and Quadra.

HELLCATS is not compatible with MacPlus, Macintosh Classic, SE or Macintosh Portable.

Memory Usage HELLCATS prefers 1.5 megabytes of RAM. This allows all features to activate during game play on a system with a large display.

One megabyte of available RAM is required before HELLCATS can run unimpeded on normal systems. If less is available, some of the game sounds are not loaded or are substituted but play will otherwise be unaffected. If this situation occurs, a dialog box appears with an appropriate message.

In any event, a minimum of 800K of RAM is required for game operation.

If you are using a monitor larger than a 21" RGB in 8bit mode, it is necessary to increase HELLCATS "Allowed Memory Size". Do this by performing a "Get Info" and editing the appropriate entry.

You may need to limit the number of inits loaded and reduce the size of your RAM disk (if used) to better facilitate successful operation of HELLCATS.

Installation

All Users - Very Important

Place your unlocked, original HELLCATS diskette into your disk drive. Open the HELLCATS folder and double-click on the HELLCATS file. This action generates a serial number which is now displayed. Copy this serial number onto the HELLCATS PRODUCT REGISTRATION CARD and return it so that we may inform you of future HELLCATS versions and supply you with a custom unlock code for your more convenient use of HELLCATS.

After completing the registration card, select quit from the dialog box. Please do not attempt to play HELLCATS from the original diskette.

Floppy Disk Users

After completing your registration card, create a backup copy of your original HELLCATS diskette and use to run the game. Double-clicking on the HELLCATS file launches the game.

Hard Disk Users

After completing your registration card, create a backup copy of your original HELLCATS diskette. Then, create a folder on your hard disk. Copy the contents of the HELLCATS folder from your backup diskette into the newly created folder. Place the backup diskette in a safe place and use it only if installation is required in the future. HELLCATS does not require either the original or backup diskette after installation on a hard drive has taken place.

Please make a backup copy of your diskette after installation of the software. Use only your backup copy for all other operations.

The Hellcats diskette has not been copy protected, allowing for simple diskette duplication. For instructions on diskette duplication, please refer to documentation that accompanies your Macintosh.

4 HELLCATS USER MANUAL

Playing the Game

The player's objectives are to achieve the rank of Captain and collect all mission accomplishment awards. *Objective*

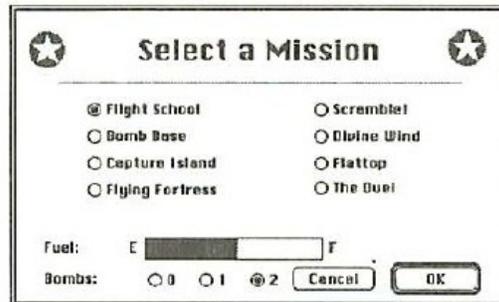
Double-click on the file HELLCATS. After entering the correct answer to the "Pilot's Handbook" question, the following dialog box appears: *Getting Started*

Rank	Name	Score
Captain	McCambell	32000
Lt. Junior Grade	Spagnola	200
Ensign	Anderson	0
Ensign	Peg	0
Ensign	Barre	0
Ensign	Brewer	0
Ensign	Frenco	0
Ensign	Stewart	0
Ensign	Jones	0
Ensign	McFadden	0

You start with the rank of Ensign. **Enter your name in one of the blank name fields. Click the OK button or press return after entering your name.**

Another option in the ACTIVE DUTY ROSTER is to view a DOSSIER of any player. The DOSSIER shows the total accomplishments of a player since his creation. More on this is covered in the MISSION STATUS section.

Next, the SELECT A MISSION box appears allowing you to choose any one of the missions or FLIGHT TRAINING.



Select **FLIGHT TRAINING** and click the **OK** button.

The screen displays the forward cockpit view from the Hellcat. The airplane is located at the south end of the runway. On the left is the tarmac and assorted buildings. On the right is the control tower.

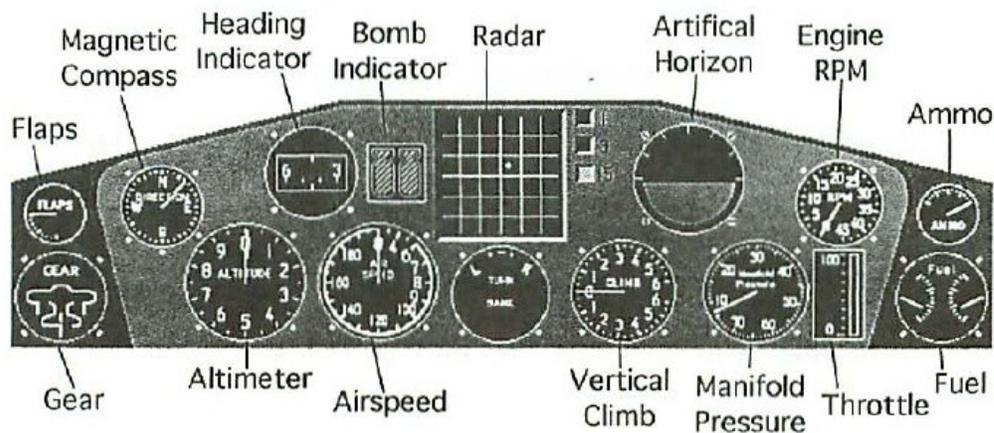
Press the "t" key. You are now looking at your Hellcat from the control tower view. **Press the "v" key** to return to the cockpit view.

Turn to the section on "Taking off" (page 9) to get complete instructions on becoming airborne. Fly around for a time to become familiar with the flight characteristics of your Hellcat. At any time you may press the "esc" or "" key to freeze the game action and enable the mouse pointer allowing you to change options or begin a mission. A new mission is begun by selecting "New Mission" from the "File" Menu.

It is best to practice taking off and landing as well as all other basic flight maneuvers in **FLIGHT TRAINING** because no enemy engagement can occur.

6 HELLCATS USER MANUAL

Instrument Panel



Airspeed—indicates the speed of the airplane flying through the relative wind. The needle wraps around for speeds over 200 knots.

Flaps—indicate flap position. The Hellcat has only two flap positions—fully retracted and full flaps extended (40°).

Gear—indicates the position of the main landing gear. Gear down position is indicated in the above diagram.

Magnetic Compass—indicates magnetic north.

Altitude—indicates vertical height of the airplane above sea level. Altitude is measured in hundreds of feet by the big needle and thousands of feet by the small needle.

Heading Indicator—represents the directional course of the

HELLCATS USER MANUAL 7

airplane in degrees. 0° is north. The trailing 0 is left off of the indicated course. So, 30° would be a "3" and 270° is shown as "27" on the Heading Indicator.

Bombs—indicates the number of bombs remaining. Two bombs are shown to be available in diagram above.

A stripped bomb indication means that the bombs are available but may not be released because the airplane is sitting on the ground.

A solid gray indication means that the bombs are available and may be released at any time.

Radar—indicates presence of other aircraft. A white dot shows the relative position of another airplane. The center of the radar screen is your position. Dots on the bottom half of the screen are behind you and those in the top half are in front. Likewise, left and right of center dots indicate aircraft to the left and right.

One mile, three mile and 15 mile range selections are available. The current setting is indicated to the immediate right of the radar screen and may be changed by pressing the "tab" key. This range is the approximate distance from your position to the edge of the radar screen. So a dot just appearing at the top of the screen with the selection set on 15, would be 15 miles directly in front of you.

Vertical Climb Indicator—indicates vertical speed in hundred feet per minute increments.

Artificial Horizon—indicates the attitude of the airplane in relation to the horizon. Bank angle increment of 30° are marked on the edge on the instrument.

RPM and Manifold Pressure Gauges—show engine power generation. The full throttle RPM level is approximately 3000 in level flight, anything under that indicates a lower throttle setting or engine damage.

Throttle—controls fuel flow in the engine. Throttle settings may be made in increments of 10%. Throttle level is

8 HELLCATS USER MANUAL

increased by pressing the "+" key and decreased by pressing the "-" key. Holding a key down adds or subtracts multiple 10% increments of throttle. A gray bar indicates the current throttle level.

Ammo—indicates remaining .50 cal. rounds measured in seconds. Your fully armed Hellcat is capable of 45 seconds of continuous machine gun fire. Rearming takes place on a friendly carrier or base or at an airfield.

Fuel—indicates amount of fuel in the left and right tanks. Full tanks provide approximately three hours of flight time at 70% throttle setting. A full load of fuel weighs 1500 lbs. and affects flight characteristics of the airplane. Refueling takes place on a friendly carrier or base or at an airfield.

Cockpit views are controlled by the arrow keys. Pressing an arrow key changes the view 45° in the indicated direction. Left and right arrow keys can be used to move the view 360°, 45° at a time. Up and down movement is limited to 90°. *Views*

Other views and their key commands are:

- "c" chase plane—view the Hellcat from a trailing view.
- "t" tower—view from the closest tower, up to ten miles away.
- "e" enemy—view from the closest enemy cockpit.
- "r" rear—view out of the back of the Hellcat.
- "v" front—front cockpit view of the Hellcat.

Mouse, keyboard or joystick input may be used to control the movements of the airplane. Choose one by simply using it. You can freely change from mouse to keyboard control at any time. *Flight Controls*

Under normal operation the airplane is kept in coordinated flight, meaning that only aileron controls are moved to control flight. Ailerons are controlled by mouse or joystick movements. Basically, move the mouse or joystick in the direction you wish to go and the airplane moves that way. *Mouse and Joystick*

To:
Descend move mouse or joystick forward (away from you).
Climb move mouse or joystick back (toward you).
Left bank move mouse or joystick to your left.
Right bank move mouse or joystick to your right.

When the mouse or joystick movement is neutralized, the movement in that direction stops, leaving the airplane's attitude changed. To regain the original attitude, you must compensate by moving the mouse or joystick the same amount in the opposite direction for the same amount of time.

Keyboard The numeric keypad may be used for flight control. The "8", "6", "4", and "2" are substituted for mouse or joystick movements.

Rudder Control Rudder is controlled by holding down the "shift" key and pressing "z" or "." for left rudder or "x" or "/" for right rudder.

Taking Off A successful takeoff requires full throttle, a straight path down the runway or carrier deck, and a gentle pull back on the mouse (or tap of the numeric keypad "2" key) when a speed of at least 80 kts is achieved.

To reach full throttle quickly, hold the "+" key down until the gray bar in the throttle indicator is full. Hold the airplane in the center of the runway by correcting for any deviation with gentle left and right movements of the mouse.

As the speed increases, you will notice the airplane's nose drop down to the horizon. This occurs just prior to achieving takeoff speed due to air pushing the tail up.

When 80 kts. is indicated, start a climb by pulling back on your mouse or joystick (or pressing numeric keypad "2"). You are airborne when the Vertical Speed Indicator shows a positive rate of climb. Until you are comfortable with takeoffs, try to keep your climb shallow enough so that you can still see the horizon.

After becoming airborne, press the "g" key to retract the landing gear. This increases airplane performance

10 HELLCATS USER MANUAL

tremendously. The gear indicator will show the gear retracting.

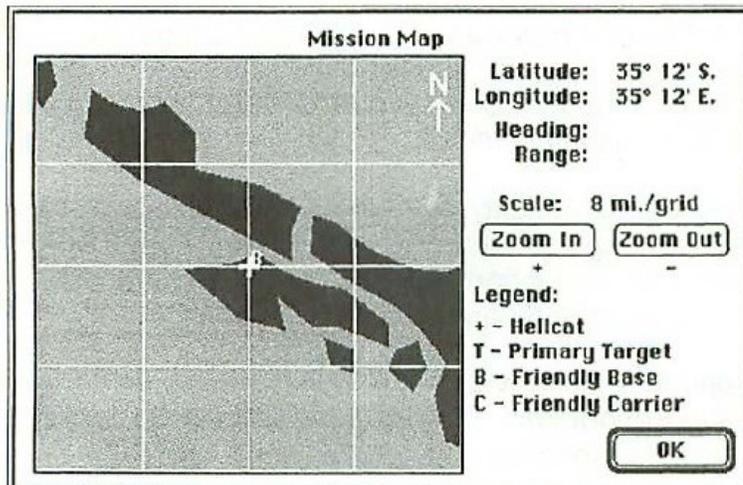
For carrier based takeoffs, it is advisable to start with your flaps lowered. Do this by pressing the "f" key. The Flaps indicator needle moves from its horizontal position down to a 40° angle. Flaps provide greater lifting ability at the cost of some forward speed. Flaps should be retracted for normal flight because of the performance cost.

Flaps may be necessary for carrier takeoffs with a full load (full fuel and bombs).

While on any of the missions, you have access to a mission map which displays the entire island chain with points of interest.

Navigation

Suspend play by hitting the "esc" key, then select "Mission Map" from the "File" menu. The following dialog box appears:



The center of the map, noted by a black "+", is your current position. A "T" shows the position of the current missions target. A "C" indicates the position of a friendly carrier. A "B" is the location of a friendly base. And a "A" is an airfield.

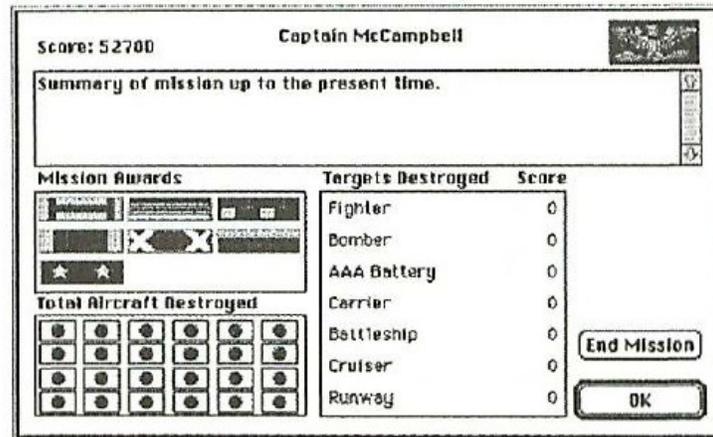
Grid lines on the map show relative distance of objects and land mass from you. Zoom functions allow you to scale the view size of the immediate area.

Exact distance and heading information can be obtained by moving the mouse pointer to a desired destination on the map. Press and hold the mouse button, and a course line appears. Distance in miles and heading in degrees are shown to the right of the map.

To fly to a point, simply turn the airplane until the Heading Indicator centers on the appropriate course. Keep that course centered and fly the duration required given your speed. You may also periodically bring up the map again to check your progress.

Mission Status

At any point you can check your status in the current mission. The following dialog appears when "Mission Status" is selected from the "File" menu:



The message box informs you if you have accumulated points, if your mission has been successful and requires landing, or if you have failed your mission.

Kills that have not been added to your permanent score are displayed in the "Targets Destroyed" area. Score accumulated in the current mission follows each target type.

Total aircraft kills since the players creation are displayed in the "Total Aircraft" area. All mission awards that have been accumulated by the player are displayed in the "Mission Awards" area.

12 HELLCATS USER MANUAL

Scores are accumulated but not permanently awarded to the player when a kill occurs. Scores become permanent when a player lands, ditches, bails out, or dies. A check of the "Mission Status" shows if any score is accumulated but not yet permanently awarded. *Scoring*

The types of enemy objects that may be killed and their associated points are:

Fighter	500
Bomber	1000
AAA battery	50
Carrier	2500
Battleship	1500
Cruiser	750
Runway (Enemy base)	100

Enemy aircraft and ships must be completely destroyed (or sunk) before points are awarded.

No points are awarded for destruction of friendly objects.

All players start with the rank of Ensign and move up when enough points are earned. Ranks and the point levels are: *Promotion*

Ensign	0
Lieutenant (junior grade)	2000
Lieutenant	5000
Lieutenant Commander	10000
Commander	20000
Captain	40000

Each mission that is completed successfully earns the player a Mission Award. Awards appear in the appropriate section of the player dossier. *Awards*

Only one award is given to a particular player for completing a particular mission.

The Hellcat's offensive weapons consist of six .50 cal. machine guns (three on each wing) which are fired by pressing the mouse button or the space bar on the keyboard. Two streams of tracer fire can be seen as black dots traveling *Weapons*

forward when the guns are fired. Tracer fire indicates the direction that the bullet stream is following.

*Finding
the
Enemy*

Enemy fighters appear near target areas and known enemy areas, however, you may also discover them almost any place else. Their distance and heading from you can be determined from the radar screen once they are inside a 15 mile radius. As they get closer, change the radar range selection to the three or one mile setting. During close combat a radar setting of one mile is very helpful to monitor their maneuvering.

You can "cheat" by pressing the "e" key when an enemy aircraft is present. This gives you the closest enemy pilot's view. If he is killed the view moves to the next closest enemy or back to your cockpit if all enemy are destroyed. Using the "One Line Instrument" option while in enemy view mode displays his instrument information. This may be helpful to determine his true position.

If the enemy closes on the radar screen but does not appear in your view, his altitude is either much greater or less than your own.

*Auto
Pilot*

Holding down the "a" key causes the flight controls to automatically maneuver toward the nearest enemy fighter. Controls are returned when the key is released.

*Dog
Fighting*

Effective aerial combat is achieved by lining an enemy aircraft up in your gun sights and shooting a short burst (two or three seconds) at the target. The further away the target is, the more "lead" it must be given. Leading is done by lining the gun sights up in front of the target on its flight path allowing the target and bullets to intersect.

If they see you, enemy aircraft are likely to try and get behind you and begin firing. Since you are most likely doing the same thing, a great deal of turning ensues. The pilot who succeeds in turning faster and shooting accurately is the likely victor.

You can use flaps to alter your speed and lift during aerial combat if the need should arise. Also, lowering the landing

14 HELLCATS USER MANUAL

gear acts as a good speed brake.

Many ground objects can be destroyed by hitting them with machine gun fire. Airplanes, anti-aircraft artillery guns, fuel tanks and some small buildings are among those objects susceptible.

Strafing

Line the object up in the gun sights and fire bursts until a small explosion appears in place of the object.

Choose the number of bombs desired at the beginning of each mission. Take into account whether bombs are needed for that mission and the fact that bombs add weight and therefore cost performance.

Bombing

Your Hellcat may carry a maximum of two, 500lb. bombs. If more are needed, land at an airfield, friendly base or on a friendly carrier.

One bomb is released when the "b" key is pressed. A "click" sound is heard when the release occurs.

A released bomb moves forward with the momentum gained from the speed it achieved while still attached to the airplane. So, if the bomb is released with the airplane in level flight, the bomb will "sail" making it difficult to strike a particular point on the ground.

Dive bombing, or diving the airplane at a ground target, increases the accuracy of placement by using gravity working in conjunction with the bombs forward momentum.

A bomb strike on a ship is displayed as an explosion and resulting fire. The larger the ship the more bomb strikes are required to sink it. Strikes required are:

*Hitting and
Sinking
Ships*

Carrier	3 strikes
Battleship	2 strikes
Cruiser	1 strike

You are credited with a runway strike if the bomb lands on the runway. If the strike hits the edge of the runway, credit is given if most of the bomb lands on the runway.

*Hitting
Runways*

For more on combat, consult section 2 of the "Pilot's Handbook".

*Aircraft
Damage*

Enemy

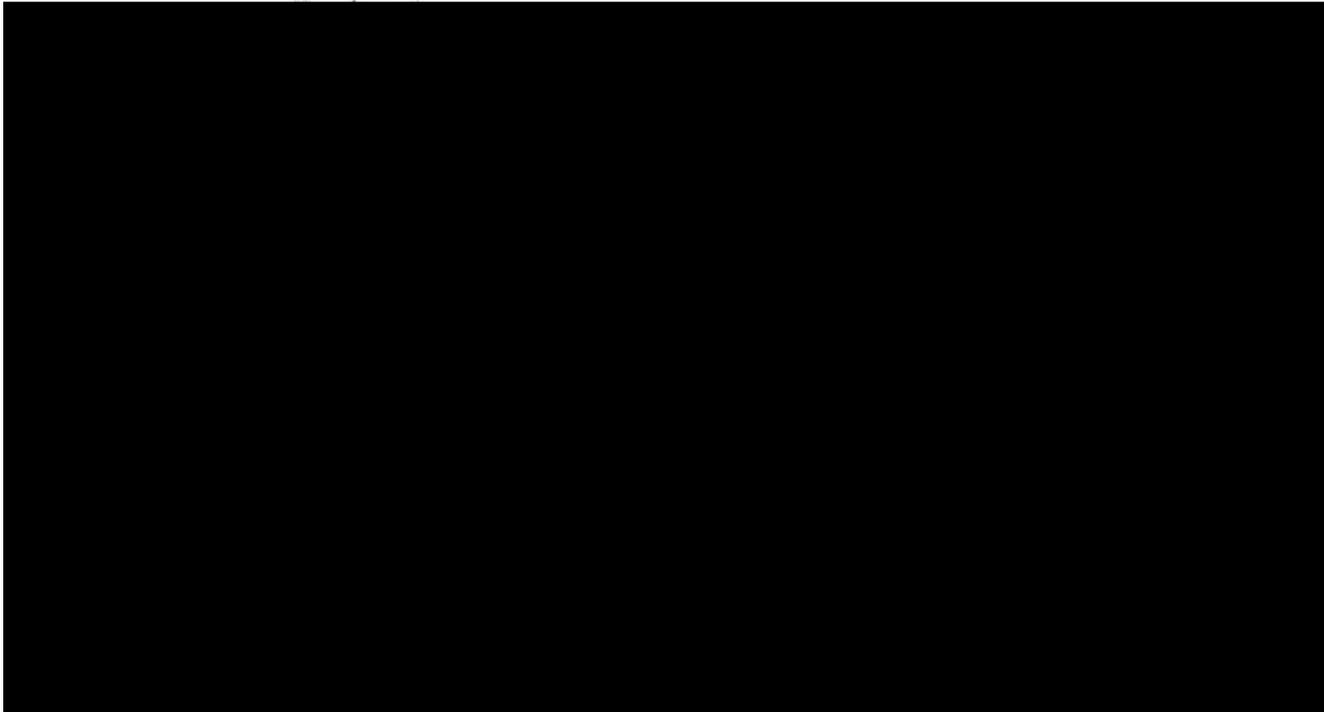
Smoke, flames or erratic flight, are signs that the target aircraft has been damaged. The aircraft is destroyed if it crashes into the ground or water, or if it explodes. If your opponent is heavily damaged but still in control, he often loses his fear of death and may fly straight into the nearest friendly ship.

Hellcat

Your plane is receiving hits by enemy fire when a "clunk" sound is heard. If the enemy airplane is behind you, you may notice a stream of tracer fire moving past.

Bullet hits may pass through the Hellcat fuselage harmlessly or they may damage some critical part. Damage may affect the:

Engine,
Landing gear,
Flaps,
Ailerons,



16 HELLCATS USER MANUAL

are in, but, the closer you get to a friendly area (base, carrier, etc.), the more likely you are to be rescued. If you can't make it out of an enemy area, you will most likely be captured and made a POW rendering you inactive.

Disabled Landing If landing is possible it is a better alternative than bailing out or ditching because you can glide for a time to a potentially more favorable area. Also, the chance of getting killed is small if you can successfully land.

To successfully land a disabled aircraft, lower the landing gear, maintain at least a 70 knot speed, and level the airplanes attitude (flare) just prior to touching down on a flat surface.

Ditching Ditching is basically the same thing as a landing, only on water. However, no landing gear may be used during a ditch. Successfully ditching the aircraft in friendly territory may still result in drowning.

Bailing Out Press the "j" key to eject from the Hellcat. Your parachute opens automatically and you float straight down to the surface. You must have enough altitude to allow the chute to open completely before you come in contact with the ground. Bailing out is the most dangerous of the emergency procedures.

Landing can be successfully done on any hard, flat surface. *Landing*

To land on any surface:

- 1) lower landing gear,
- 2) line up a few miles behind the intended touchdown point,
- 3) reduce throttle to maintain a speed of between 70 and 120 knots,

HELLCATS USER MANUAL 17

- 4) allow altitude to decrease until just above the surface,
- 5) reduce throttle to zero when the touchdown point is made,
- 6) level the attitude of the airplane (flare) and let the landing gear touch the ground.

Press on the space bar to engage the brakes. Push forward on the mouse or joystick to create more downward force on the airplane to facilitate braking.

Carrier Landings

Carriers have arresting wires that "grab" a hook that hangs down from the Hellcat. The back half of the carrier (half with the numbers) contains these wires and will quickly slow your airplane down if it catches one of them. Touching down in this area is all that is required to catch a wire. Be sure that the throttle level is at zero when touchdown is made.

Use of the flaps helps create a steeper descent without increasing downward velocity. Flap use requires a higher throttle setting to offset the increase in drag.

If you land too long and do not catch a wire, immediately increase the throttle to full and fly around for another try.

Mission Summary

After landing, bailing out, ditching or dying the following dialog box appears:

The dialog box displays the following information:

- Score: 52700
- Captain McCampbell
- Summary of mission up to the present time.
- Mission Awards: A grid of icons representing various mission achievements, including two stars.
- Total Aircraft Destroyed: A grid of 12 icons representing destroyed aircraft.
- Targets Destroyed and Score table:

Targets Destroyed	Score
Fighter	0
Bomber	0
AAA Battery	0
Carrier	0
Battleship	0
Cruiser	0
Runway	0

Buttons: End Mission, OK

18 HELLCATS USER MANUAL

Points are permanently added to your score and Mission Awards are given for successful completion of a mission.

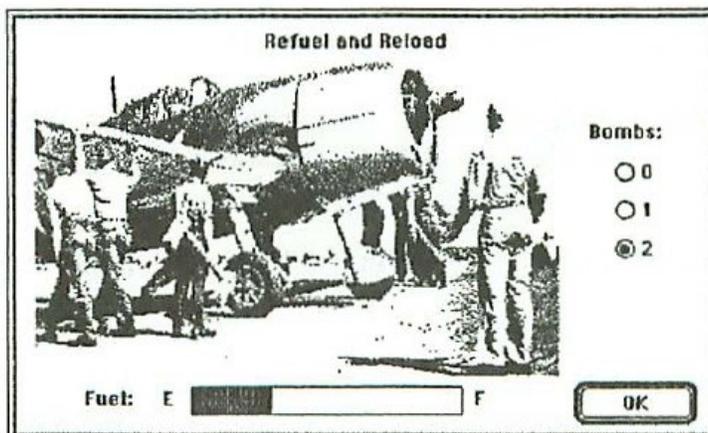
Moving around on the ground is accomplished by using the throttle and brakes. For best results, come to a full stop, apply brakes (space bar) and increase throttle. No forward movement occurs until you release the brakes but turning is possible. The higher the throttle setting the faster the turn rate. Use the down arrow for a good taxiing view.

Taxiing

All refueling and repairs take place when the engine is turned off. This is accomplished by pressing the "m" key.

*Refueling
and
Repairs*

When refueling at land bases and airfields, the plane must be on any part of the runway or tarmac. When the "m" key is pressed, the following dialog box appears:



Machine gun ammo is automatically reloaded and repairs are automatically made when refueling and reloading is performed.

Save Settings saves currently selected Options and Scenery selections for use in subsequent game sessions.

Commands

New Mission starts a new mission

Mission Status brings up the "Mission Status" dialog

HELLCATS USER MANUAL 19

	box which contains information on the kills and mission success.
Mission Map	displays the "Mission Map" for navigation.
Resume	resumes play.
Instant Replay	shows a third person view of interesting action that occurred during the last five seconds of play.
End Mission	ends the mission in progress. Points that had been earned since the last landing, bail out or ditch are lost.
High Scores	shows a list of the top scoring players. The highest scoring of both active and inactive players are displayed.
Quit	exit the game.
<i>Options</i>	
Sound	enables all loaded game sounds.
Engine Sounds	enables engine sound only if Sound is enabled.
Triple Time	speeds all game actions by a factor of three. This option is not effective until the Hellcat is above 500 feet.
Cockpit Views Pan	causes a pan to a new view as opposed to a snap. Cockpit views are selected by the arrow keys in 45° increments.
One Line Instruments	displays one line of digital instrument information for cockpit views other than the front. When this option is selected and the enemy view is selected, the nearest enemy's instrument information

20 HELLCATS USER MANUAL

	is displayed.	
Full Screen, 1/2 Height, 1/4 Height	select game screen size.	
Lowest— Highest Detail	detail level dictates how close an object must be before it appears on the screen. A lower detail level causes higher game performance. All aircraft are automatically kept at the highest level of detail despite this setting.	<i>Scenery</i>
Haze	simulates atmospheric haze.	
Clouds	displays a variety of cloud formations.	
Ground Clutter	displays appropriate objects on the surface to heighten a sense of distance to the ground. On land, trees are shown. On water, white caps are displayed. Sand terrain shows sand dunes.	
Shadows	casts shadows from aircraft onto the surface.	
Real Time Shading	changes the shading on objects based on the angle to the sun.	

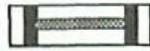
Missions

Flight School

<i>Mission Objective</i>	Increase flight skills in the Navy model F6F Hellcat.
<i>Mission Origin</i>	The exercise area is located near Carson City, Nevada. All activities are to be confined to the 15 mile area around the base. The lake to the west is for civilian use and is off limits for military operations.
<i>Mission Target</i>	Primary fighter skills may be honed by locating and dispatching "drone" aircraft flying in the exercise area. The aircraft are painted yellow and appear on the panel radar display.
<i>Secondary Targets</i>	Strafing and bombing practice may be conducted southeast of the field. Practice targets are placed for these purposes.
<i>Known Enemy Positions</i>	Not applicable
<i>Additional Notes</i>	Directly west of the base is a carrier landing practice strip. It is the same size as an Essex class carrier with working arresting wires. Your training Hellcat has been altered to carry six—500lb. bombs to allow easier bombing practice.
<i>Summary</i>	A good command of the new F6F Hellcat airplane is necessary before the pilot may receive orders for active combat duty. A quality training facility enabling officers to improve their flying skills reduces pilot attrition.

22 HELLCATS USER MANUAL

Bomb Base



Inflict damage on a key enemy position. Successfully place at least one bomb on the runway of the enemy base and return to the carrier (or alternate base if necessary).

Mission Objective

You are part of Hellcat squadron VF6, aboard the Intrepid (CV11). The carrier position is two miles north of Guadalcanal island, part of the Solomon island chain, in the Pacific theater of operation.

Mission Origin

Your target is the runway located on the major enemy base of operation in the area. It is located on Guadalcanal, 19.2 miles west, heading 260°.

Mission Target

The enemy base area may provide various targets including aircraft and defensive weapons.

Secondary Targets

Enemy combat air patrol is carried out in most of the surrounding area. Activity intensity is greatest close to the base.

Known Enemy Positions

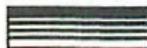
Directly to the south, at the base of a hill, is the location of an airfield that is used for allied operations. This area may be regarded as friendly and should be used for landing if Intrepid is damaged.

Additional Notes

The enemy gained an important forward base in this part of the Pacific. High command has decided to place a high priority on stopping hostile force progression and has ordered a full-scale invasion to eliminate their new positions. It is imperative that their ability to launch defensive air strikes be impeded.

Summary

Capture Island



<i>Mission Objective</i>	Inflict damage on a key enemy position. Successfully place at least one bomb on the runway of the enemy base and return to the carrier (or alternate base if necessary).
<i>Mission Origin</i>	You are part of Hellcat squadron VF18, aboard the Intrepid (CV11). The Intrepid is located 11.2 miles east of Shortland Island.
<i>Mission Target</i>	Your target is the runway located on the major enemy base of operation in the area. It is located on the south side of Shortland Island, 11.2 miles west, heading 265° from the carrier.
<i>Secondary Targets</i>	Any structures existing on the island are acceptable targets.
<i>Known Enemy Positions</i>	Immediate area and all of Shortland Island.
<i>Additional Notes</i>	The Intrepid is escorted by a battleship which is engaged in shelling the enemy port. Should the Intrepid be damaged while the mission is in progress, return to the airfield on Fauro Island.
<i>Summary</i>	Hostile positions in this area are supplied from a central depot located on Shortland Island. It's removal will weaken all other enemy forces remaining east of Bougainville.

24 HELLCATS USER MANUAL

Flying Fortress



Escort B-17 bomber to enemy position on the Florida Islands. The B-17 and your aircraft must return to Henderson Field.

*Mission
Objective*

You are part of Hellcat squadron VF22, temporarily stationed at the newly activated Henderson Field, allied air base.

*Mission
Origin*

The bomber's target is an airbase located 21.3 miles north, heading 15°.

*Mission
Target*

Two enemy ships reside in or about the Florida Islands. Their destruction would be a valuable accomplishment.

*Secondary
Targets*

Florida Islands and the New Georgia Sound waters surrounding them.

*Known
Enemy
Positions*

An American carrier is stationed west of your flight path.

*Additional
Notes*

When using the enemy view, if the B-17 is the closest other airplane, its view will be seen.

The B-17 bomber is not capable of defending itself against the multiple fighter attacks and heavy ground-to-air defenses that are estimated to occur on this run.

Summary

Scramble



<i>Mission Objective</i>	Successfully defend Henderson Field from enemy bomber attack.
<i>Mission Origin</i>	You are part of Hellcat squadron VF22, temporarily stationed at Henderson Field, located in the north-central part of Guadalcanal Island.
<i>Mission Target</i>	Multiple incoming aircraft. Spotters report that one of the planes is an enemy bomber. Radar reports position of the aircraft is 15 miles to the west and closing at 190kts.
<i>Secondary Targets</i>	Any fighter aircraft escorting the bomber.
<i>Known Enemy Positions</i>	The bomber group probably originated from a base on Banika, one of the Russell Islands.
<i>Additional Notes</i>	None.
<i>Summary</i>	You have less than five minutes to intercept and dispatch the enemy bomber before it reaches Henderson. Ground-to-air defenses will be operational when the group comes into range, however, they alone are incapable of successful defense.

Divine Wind



Prevent enemy suicide fighters from sinking friendly carrier.

Mission Objective

Your Hellcat is receiving repairs at an airfield on Gizo Island, one of the New Georgia islands, located in the central Solomon Islands chain. The carrier in peril is located 6.6 miles, heading 7° from the island.

Mission Origin

Multiple incoming suicide fighters. Spotters report two groups of five aircraft approaching from a northerly direction. The groups appear to be five minutes apart.

Mission Target

None.

Secondary Targets

Fighter origin is unknown. No other known enemy positions in the area.

Known Enemy Positions

Suicide bombers are known to have but one objective—strike the ship. Either the carrier or your base may be used for refueling and rearming. Once the carrier is damaged, no landing may be made.

Additional Notes

No additional fighter help is available. There are 10 enemy planes versus the carrier with only you between them. Good Luck!

Summary

Flat Top



<i>Mission Objective</i>	Sink enemy carrier.
<i>Mission Origin</i>	Your squadron is stationed at a base on an island at the north end of Santa Isabel Island.
<i>Mission Target</i>	An enemy aircraft carrier has been spotted to the northeast of your position.
<i>Secondary Targets</i>	Enemy fighters have been spotted performing combat air patrol.
<i>Known Enemy Positions</i>	No other enemy position exists in the immediate area.
<i>Additional Notes</i>	A friendly cruiser is stationed east of the base.
<i>Summary</i>	Your base seems the likely target for attack if the enemy carrier is not sunk.

28 HELLCATS USER MANUAL

The Duel



Do not allow enemy to sink the Intrepid. Find and scuttle enemy carrier. *Mission Objective*

Your squadron, VF15 is stationed aboard the Intrepid located north of San Cristobal and southeast of Malaita. *Mission Origin*

An enemy aircraft carrier has been spotted due north of your position approximately 15 miles. *Mission Target*

Multiple escort ships and a large number of enemy fighter support. *Secondary Targets*

No other enemy position exists in the immediate area. *Known Enemy Positions*

A friendly base is located on the small island 16 miles, heading 269° from your carrier's position. *Additional Notes*

Another Hellcat piloted by Lt. Commander Charles Herbert, is taking part in this sortie. He has orders to engage enemy fighters and bomb their carrier if in a position to do so.

The enemy carrier, spotted very close to your position, has already launched a strike force that is headed your direction. Defend and destroy. *Summary*

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Command Keys

Views

chase plane	c
tower	t
enemy	e
rear cockpit	r
forward cockpit	v
arrow keys	change cockpit view 45°

Throttle

increase	+
decrease	-
kill engine	m

Game Controls

pause	p
get menu bar	<esc> or `
lowest detail	<Cmd> 1
highest detail	<Cmd> 5
sound	<Cmd> s
engine sound	<Cmd> e
triple time	<Cmd> t
quit	<Cmd> q

From menu bar

instant replay	<Cmd> i
resume	<Cmd> r
mission status	<Cmd> x
open	<Cmd> o
new mission	<Cmd> n
mission map	<Cmd> m

Weapons

machine gun	<space> or mouse button
drop bomb	b

Aileron

left	4
right	6
center	5

Elevators

nose up	8
nose down	2

Rudder

left	<Shift> z or <Shift> . (period)
right	<Shift> x or <Shift> /

Airplane Controls

brakes	<space>
landing gear	g
flaps	f
autopilot	a (Press and hold)
radar range	<tab>
eject	j

Subject: Hellcats/Leyte FAQ, Version 2.5
Date: Wed, 18 May 94 09:42:15 -0700
From: Jack Repenning <jackr@dblues.wpd.sgi.com>

Here's a new edition of the Hellcats/Leyte Gulf FAQ. This version adds a pointer to the updaters to fix the sound problems on AV and newer Macs.

It should replace the old one in game/com/hellcats-faq.txt.

Hellcats Over the Pacific FAQ/Tips

FTP from: /info-mac/game/com/hellcats-faq.txt
Posted to comp.sys.mac.games and the Info-Mac Digest

Jack Repenning
jackr@sgi.com

Version 2.5 UPDATE May 18, 1994 by Jack Repenning
(Patches for broken sound on certain Macs)

This file's organized as follows, for easy reference. Sections I through VI contain both Q&A's and general tips.

- I. AIR COMBAT MANEUVERING
 - I.I Leyte Gulf
- II. GROUND ATTACK
 - II.I Leyte Gulf
- III. GROUND DEFENSES
 - III.I Leyte Gulf
- IV. TAKING OFF, LANDING, AND GROUND MANEUVERING
- V. SCENARIO-SPECIFIC TIPS
 - V.I Leyte Gulf
- VI. SCORING/GENERAL GAME
- VII. COMMON PURCHASING/MACHINE REQUIREMENT QUESTIONS
- VIII. EXERCISES
- IX. FTP ARCHIVE
- IX. CREDITS
 - IX.I Leyte Gulf
- X. CHEATS
 - X.I Leyte Gulf
- XI. FAQ BACKGROUND

Note that a lot of the following is bona fide "spoiler" material. Read this only if you're REALLY stumped, or have "played the game out," and are looking for things to do.

I. AIR COMBAT MANEUVERING (ACM) (including air-to-sea tactics)

Tip 1: To register a kill, try to shoot when the Zero is still relatively small. There is a bug, such that even if one's immediately

behind a Zero, pouring one's guns into him, he won't die. In real life, a Zero would be torn to shreds in a similar situation. So you do want to be behind him, but not TOO close (having the airplane fill the screen is too close; having it span the cross-hairs is probably about right).

Head-on attacks or side attacks are more successful/damaging, when up-close. Usually, though, he's shooting at you at the same time, so it's not a good idea to make a habit of this.

Tip 2: When dog-fighting, always try to get behind the Zeros. Try not to let them get behind you.

Tip 3: When dog-fighting, it is usually better to come in low, a little off to the side, and start turning BEFORE the enemy fighter flies past you. Put the flaps in the up position so you can turn faster, and if you're about to crash, use your rudders to pull you up without having to roll out (actually, this rudder technique works for all turns). If you do this, you come up behind the enemy, relatively close, and you just have to shoot at him until he gets hit. Make sure you don't go too fast and fly past him (or worse, crash into him if you're not careful).

Tip 4: A technique to use when dog-fighting is a "skidding turn." In World War II, a consistent trait of American aces was their willingness to "abuse" the airplane; the Japanese pilots, in comparison, were very good, but tended to fly "coordinated" too much. Liberal use of the rudder--man handling the airplane to your will--can give you the winning edge.

Tip 5: Getting someone off your tail:

Plan A: start a tight turn, drop the gear, reduce power, and kick in the flaps.

Plan B: build up as much airspeed as you can, go level, kick the flaps in and pull up into a vertical position.

(Plan B may not be a good thing to try with a sick engine).

Tip 6: Make liberal use of the rudder controls. With these you can out-turn the Zeros. In fact, with good airspeed you can turn faster with the rudders than by banking. They also provide excellent attitude control when you are on your side in a turn. I find this very useful when turning close to the ground. They can be used to do snap rolls. When flying slowly, bank one direction, then hold hard opposite rudder. This takes a little fooling around. The most important use of rudders is to line up a target, either on the ground or in the air. (Use Caps Lock so you don't have to use the shift key all the time.)

Tip 7: To keep from overtaking your target (aircraft), simply reduce throttle while holding your attitude. If that doesn't work (closure rate too fast), try gear, and flaps, in that order, giving time to get a trend rate from each attempt. To counteract the upward pitching moment of the flaps, anticipate it, and command pitch-down slightly, to keep the target

in sight. If this still doesn't work, climb, but keep the Zero in sight. If you get really close, the Zeroes will turn, so take a guess and turn in that direction. If you guessed wrong, just complete the circle and pick your victim up again.

Tip 8: Lower the gear to slightly decrease your speed. Flaps may be used for more effect.

Tip 9: You rarely (if ever) need a full tank of gas, and the difference in performance is amazing. No mission really needs more than 30% to be completed in a reasonable amount of time; an extra 25% would be a good reserve.

Tip 10: If your mission doesn't need them, leave bombs behind. They are heavy and decrease performance. Take as little fuel as possible for the same reason. A full tank is 1500 pounds and is good for 3 hours at 70% throttle.

Tip 11: Don't waste ammunition! You've only got so much. If you see flames, instantly break off the attack and move to another target; don't be morbid and wait for the splash.

Tip 12: Lots and lots of quick bursts are better than a couple of long ones.

Tip 13: To judge the altitude of bogies, keep in mind that if they're BENEATH the horizon, they're below you; if above the horizon, they're above you. In general, by the time you see them (straight and level), if they're in your field of view, they're no more than 1500' above or below you.

Tip 14: Taking on the whole flock: When you have several enemies coming against you all at once, you need more than good offensive moves: you need something that keeps one from nailing you while you're chasing another. Here are two "one for all" techniques:

Aerobee effect: This is kind of a yo-yo while in a tight circle. The basic posture is a tight, level circle - this gets them all chasing you, and usually herds them all into a tight little knot, more or less opposite you on the circle. Now, you need to work them around into your sights. Since you're turning hard, you're already banked into the turn; bank out/up a bit, while keeping the stick way back: you open the circle a bit, and climb. Now, roll back over and down. As you return to your base altitude, you gain speed around the circle, catching up with the trailing zeke. Get it right, and he falls right into your sights - smoke him!

Divide and conquer: if they're all in a fur-ball, going every way from Sunday, drive through taking pot-shots and ducking. One or the other of two things will happen: either one of them will latch onto your tail, in which case you go to the "getting them off your tail" maneuvers - fast! Or, more desirably, one of them will turn tail and run away. Don't be fooled: this is not cowardice, it's group fighting, but you can use it anyway.

While you're chasing this one, two bad things are happening: you're leaving the scene, where you're probably trying to protect something or other, and one of the others is probably latching onto your tail. So don't chase the decoy very long, and watch your tail closely, but you'll probably get one or two good shots in at him. Make them count, and he'll be bleeding too much to play in the rest of the fight. Then, wade back in and cut the odds down some more.

**** On Using a Mouse for flight control ****

Tip 15: Some people like using the keyboard with Hellcats. There is nothing wrong with that. However, a lot of folk use the mouse. Using the mouse is easiest for most Hellcat pilots. When you use the mouse, make sure that your Mouse Control Panel Device is set at its lowest tracking speed. If tracking is set high, your control over the aircraft will be near zero and your maneuvers will seem choppy and erratic. If your mouse CDEV has a 'tablet' setting, this is preferred. Above all, experiment and adjust. There are pilots out there who are very proficient with the mouse set at its highest setting.

Another thing about the mouse: the idea is that you hold the mouse in a particular position - a bit to the right to roll right, or a bit back to pull the nose up - **not** that you move the mouse momentarily to make a change. This sometimes confusing to people who've used the keyboard to fly, where you usually tap a key to change the control surfaces. The farther you move the mouse, the more the control surfaces move.

If you have your tracking set high, then a small mouse motion makes a large control surface motion. Sounds good, huh? But a fast motion makes a bigger change than a slow one: if you twitch the mouse away from the center, then move it back to the center more slowly, the control surfaces will **not** return to center position. This is the basic reason why you should turn the tracking down.

It is normal, depending on air speed and whether you have the flaps down or not, for the "neutral" position (where you hold the mouse to fly straight and level, or to continue some turn) to change: if you're going slow, for example, you not only have to hold the nose higher to maintain altitude, you need to pull back farther on the stick - er, mouse - to keep it there. If you neutral point drifts uncomfortably, or you get too close to the edge of the mouse pad, just lift the mouse and reposition it nearer the center - but not actually **at** the center: try to put it in the spot you expect it to be for what you're doing at that moment, or you'll just fall off the other side of the pad a moment later.

Q: Just because I see something on radar, does it see me? Will they immediately come after me, or do I have some time to pursue my mission before I worry about the Zeros?

A: Maybe, maybe not. Most likely yes. Unless you are in 'Scramble' or

'Flying Fortress,' you can take your time. Usually Zeros are easy points and it is fine to try and take them out. You *DO* need to worry about the Zeros in 'Scramble' and 'Flying Fortress' as your objective in those missions is to protect.

Q: Is it possible to collide with another plane?

A: Yes. If you slam into a plane, you will explode and die. This is another danger of using the autopilot.

Q: Is it possible to shoot down the pilot after he bails out?

A: No. Don't even waste your ammunition. This feature was not provided, due to "humanitarian reasons."

Q: Is it possible to collide with the pilot after he bails out?

A: Yes! Colliding with a parachute, as discussed before, or the pilot, or the lines, will result in immediate death.

Q: If I try to dogfight with another pilot using the autopilot key, half the time the autopilot drives me into the ground. Am I doing something wrong?

A: Yes. Your autopilot is not smart enough to know when you are too close to the ground. Watch your altimeter. If you are getting down to 300 or so feet and are above 180 knots, get the hell out of dodge! Pull up on the stick or make a steep climbing bank. If you don't, you will auger into the ground and will go home in a pine box.

Q: What's wrong with my plane? The Zeros run circles around me!

A: If you try turning with your flaps down, you'll find that you can keep up with the Zeroes. But watch your airspeed!

Q: Why does the plane seem to over react to stick movements?

A: Your mouse speed is set too fast. Use the control panel and set mouse speed to "tablet".

Q: I can't get the hang of getting behind the Zeros, how can I improve...is there a quick way to learn?

A: Just lots of practice. Practice tight turns using your flaps, gear, and (if necessary) decreased throttle. Don't be afraid to make "out of plane" maneuvers (for example, instead of a level turn, at constant altitude, lower (or raise) the nose, and turn in a tighter, smaller, cone). You can also use the autopilot, but that's a really miserable cheat. :-)

Q: How can I out maneuver a Zero that's behind me?

A: You can use the flaps ('f key) as an air brake to slow your plane. Then you can do a tight turn to the opposite heading from your original heading. When your heading is where you want it, then retract your flaps and gear (if down) and increase the throttle fully. It will probably not be able to follow you, and you'll be behind it soon!

Q: Why, in frontal passes, do the Zeros seem to always damage the Hellcat engine, contrary to actual experience?

A: Try evasive maneuvers when you are approaching the Zeros. If your radar is scanning in '1 mile' mode, and you are one square away from the Zero, use your rudder and weave to the Zero. Contrary to real life, it helps to come up from below, and slightly slow, on first contact--given the limitations of the display, what matters here is YOU seeing THEM first, and just accept that they'll probably see you, no matter what you do. Fire short bursts, head-on, break, and turn as fast as possible to re-acquire them.

II LEYTE GULF

Tip 1: To sink both cruisers and the aircraft carrier. There are a couple of hints. First, torpedoes are definitely sensitive to attitude as well as altitude and speed. You don't have to be very far out or level for the torpedo to fail. You can use an alternate view (rear, chase, ...) to see the torpedo hit the water. If you don't see it 'running' after hitting, then you failed to drop it properly. Go back around and try again.

Tip 2: When dropping torpedoes, *try* to maintain an altitude of 250 or *less*. Also, keep your air speed to below 140 knots. Also, if your airspeed is too slow, the torpedoes will explode on impact. Try to stay above 80 knots. Sometimes at 100 knots your torpedoes will explode. When approaching a target, remember to sight the ship...find out in what direction the ship is traveling. Approach the target oriented to the bow. Aim slightly ahead. AAA gunners are deadly, try not to travel in a straight line, use your rudder and zig-zag to the target. Try not to shoot back, maintain your concentration on the target.

Tip 3: The other difficult thing about torpedoes is that it is very hard to lead in formation to the enemy ships. The F6-F with a torpedo goes much slower than the Corsair, it appears. This makes it easy to make your lead too short. But if you fly straight out from your carrier, (scenario) you should hit either the enemy carrier or the nearest escort. Of course, once the ship is stopped by a torpedo or bomb, torpedoes are easy to deliver and very effective.

Tip 4: The problem with torpedoes is simple mechanics:

The bullets converging on point A; if you get real close to AAA, (something like point B) bullets will hit around the AAA's. Same thing is true about *dog fights*.

Tip 7: If you've got the time, do some climbing while flying away from the target. It avoids triggering additional air-cover takeoffs.

Tip 8: The fastest way to gain altitude, especially after takeoff is to open the throttle wide and raise the nose enough so you're going about 140 knots. If you use the flaps while you're doing this, you'll be able to keep the nose low enough to see where you're going, but the optimum speed is still 140 knots. If you're moving faster than 140 knots when you decide to climb, pull way back on the stick and "zoom" up, trading your speed for immediate altitude. As you approach 140 knots, let the nose fall until you hold steady at 140 knots. Don't do it this way if you're within shooting range of an enemy, though: 140 knots makes you a sitting duck!

Tip 9: If you need a desperation kill for a fighter or bomber, launch more than one pair of missiles. When launching four or six, the chance of one of them hitting is pretty high. And considering you only need one hit to kill any plane, it may be worth it.

Tip 10: When firing rockets, don't get too close to the explosion. Pilots have had PLANES not only lose engines, but some actually blow up because of the explosions. It is very dangerous firing missiles at planes that are only a few hundred yards in front of you--almost guaranteed death.

Tip 11: When dog fighting with a wingman, go after any smoking Japanese plane, even if the wingman was responsible for the damage. By "scoring" the last hits on the Japanese plane (or better yet flaming it), you can get full credit for a very easy kill.

Tip 12: When initially approaching the Japanese fighters, do so completely head on - when you are approximately 1/4 of a mile away, launch a couple of missiles. It is relatively easy to get one smoking in this fashion. A very useful technique with the Franks.

II. GROUND ATTACK QUESTIONS

Tip 1: Make only one pass, hit 'em hard and accurately, and get out of there.

Tip 2: If you drop a bomb while flying level it will have forward momentum and will be VERY inaccurate. That is why we use the technique of dive bombing. The manual suggest you climb to 8 to 12 thousand feet. This is about right, as any lower any you will get shot up by flack (AAA fire) and it will be hard to line up the shot. The ideal angle of a dive is 60 to 80 degrees. A good technique is to make sure you're level and look straight down. The field should be about 1/3 the way down the screen (this only works if you are level).

To look down hit the down arrow twice. If the "Pan Cockpit View" option is checked the view will sweep the area, if not the change is instant. I keep it on. You should drop the bomb between 1 and 2 thousand feet to 500 to 800 feet. Any higher is inaccurate, any lower is too dangerous.

Tip 3: The Setup: To get a direct hit on a pinpoint target (as in the test target in the training mission) fly at the point you want to hit low (500 feet or less) and fast (200 knots IAS as target is likely to be HOT as in Battleships). Zoom straight down when target goes below your panel view.

Tip 4: The Hammerhead Stall: When target appears at the edge of your view, pull up sharply until you are vertical, climb until you are about to stall and pull over so that as you stall, your plane flips over and you are pointing straight down at the target.

Tip 5: Timing the Drop: Watch your shadow on the ground. Give this a couple of tries on the training mission target to get a feel for how the shadow indicates your position and the time to drop your ordinance.

Tip 6: Pulling Out (or Popping your Rivets)

A: BETTER OFF DEAD METHOD: After the drop, cut the engine, continue to fall until you hit 500 feet, put down your flaps and simultaneously pull back hard. Immediately re-throttle. You'll scrape the ground and bounce up to around 600 feet again.

B: MOMMA, I WANNA GO HOME METHOD: Hit the flaps the moment you drop the bombs and pull back to a steep dive. Hold this attitude till you reach 200 feet and then pull level and retract the flaps. You'll be out of AAA range quickly.

WARNING! WARNING! WARNING! Never attempt this bombing maneuver when there are enemy fighters (smoking or not) around. They WILL hit you when you slow down for the stall.

Tip 7: When attacking enemy targets, try to hit them as you fly over them length wise. This way, you don't have to time your bombs exactly to hit if you're coming in to your target on a perpendicular angle. This is also very good because many times, you can sink an enemy carrier with only 2 bombs if they hit near the middle of the carrier.

Tip 8 There is a small village in the south-east of Henderson Field--three houses and a small lake--try these out for target practice.

Tip 9: South of Henderson field there is a bridge that can be "sunk."

Tip 10: You can actually sink a carrier with one bomb! If you can manage to drop the bomb in such a way that it goes under the flight deck and explodes on the main deck (under the flight deck), then the carrier will sink. It looks great in instant replay because after the bomb explodes within the carrier, you see debris fly all over the

place.

Tip 11: Another trick when going after a carrier is to dive at the red-dot on the deck. Go up to around 8-10K feet, cut power to 60-70%, and head directly for the nice red dot on the deck. At about 1000-1500 feet (a higher percentage hit occurs at 500-800 feet...but the chances of being shot down are higher) drop both (or one) bomb, break away from the escort (if there is one), and go to full power like a bat out of hell!

Tip 12: Desperate kill : If your engine is out or you are out of fuel after the first pass of a carrier (with two hits) and you are too low for expecting going back home (or whatever), try to crash you plane into the carrier (and don't forget to jump before and high enough). That way you can kill the carrier and you have a reasonable chance of being rescued (anyway it has worked several times with me). Anyway, you won't get a medal for your mission as you lost the aircraft.

Tip 13: In most of the scenarios, you most likely don't require a full tank of gas--half at most. Take what you need, but not more! If you don't need bombs, don't take them. In some of the scenarios, if you do a good job of protecting the carrier, you can land back on the carrier and rearm, this time with a bomb load.

Q: How can I sink a enemy carrier?

A: You must put 3 bombs on it. One method is to fly very low on the same heading as the ship. Use rudders to fly in a zig-zag pattern when approaching the ship to escape the AAA (Anti-Aircraft Artillery) fire. Another method is to climb to 9,000 feet and dive bomb the carrier or ship.

Q: Why don't I get credit for bombing the enemy's runway? I know I dropped the bomb right on it!

A: You probably dropped the bomb on the Japanese flag, which is a decoration between two runways. You need to make sure you drop a bomb right in the middle of the runway. Try to drop the bomb in the center (width) and the middle (length) of the runway. Once you get the hang of it, you will be able to plant the bomb anywhere on the runway.

II.I Leyte Gulf

Tip 1: You get a warning for firing at friendly units when you land if you try using rockets at the enemy while AAA is active. (What goes up, must come down...especially if your orientation is 90 degrees or less (toward the ground)). Good advice is, do not kill enemy bombers with rockets when your own flack is active. But it is ok to do it to get another 50 points when over enemy area.

Tip 2: The rockets tend to have a greater rate of decent than bombs(!); shoot high, even in rocket-bombing runs. Whereas, in a 80-degree

dive-bombing run, you want to release with the sights set just under the target, when dive-rocketing, aim just over.

Tip 3: In most surface-attack scenarios, you can clean out all the enemy air cover in one or two flights. You can then take your time with the bombing, "only" worrying about the AAA. Approach well above 10,000 feet, dive sharply, drop at about 1000 feet, and then get your tail up above 5000 and outta town, and you should be fine.

Tip 4: When using rockets, make sure you aim "above" your target. The farther you are, the higher you aim. This is because gravity has a terrible effect on rockets.

Tip 5: Always carry missiles around. They are the most versatile of your weapons. You can use them to kill subs and gun boats, planes, tanks, buildings, enemy torpedoes, etc.

III. GROUND DEFENSES

Tip 1: Dodging AA:

Never under value the view from behind, from this vantage point you can see the AAA machine gun fire before it crosses your plane, and thereby dodge potentially mission ending bullets.

Tip 2: When attacking any target that shoots back, other than fighters, their shots always seem to go in bursts. Just stay out of the stream when the burst starts, and then get back to business. This is especially helpful against that stupid bomber.

III.I Leyte Gulf Ground Defenses

Tip 1: When coming in for an attack, especially if making a torpedo run, stay VERY VERY low (i.e. less than 100 feet). This is because
a) flak gunners can't fire at less than 1000 feet
b) the AA gunners keep shooting above you if your low. It's actually pretty neat in replay. It seems your almost skimming the sea. Be careful not to get too low though, because bad things can happen if you hit the water at such a high speed. (this works with both hellcats).

Tip 2: When firing rockets, it is sometimes better to launch them when your Hellcat is sideways (i.e. wings point up and down). This tends to spread your missiles farther so they kill two targets, rather than overkilling one target. It is especially useful in killing narrow targets as well, such as the bridge or enemy subs and torpedoes.

Tip 3: When attacking a sub or torpedo, you don't have to hit exactly on target. Hitting anywhere near the front of the wake will kill a torpedo, and hitting anywhere in front or in back of the conning tower will kill a sub. So, if you have a decent shot, but not a bull's eye, fire anyway. Odds are you'll hit.

Tip 4: Hellcats Leyte Gulf missions provides you with some snappy new targets to shoot at. When bombing tanks you can actually take

out more than one target with a single bomb. By placing your weapon between two fairly close tanks, both of them explode! Be careful not to get too far away though, or you won't destroy either of them! My secret is to approach the two tanks by either lining them up (so I'm pretty sure of nailing at least one of them if not both) or approaching directly perpendicularly to the line formed by the two tanks (so I can come in high, drop down on the center point between the two tanks with more accuracy.)

Tip 5: When bombing surface contacts (the safe and sane way), approach high (>10K) and fast (>200mph), no flaps, looking down between your knees (one tap down-arrow). Hold the horizon just about even with the top of the screen (you'll be climbing around 500fpm, and can cruise at around 230 mph wide open). When the target disappears off the bottom of the screen, you're nearly over it. Push forward hard on the stick, return to cockpit view, and dive down with the cross-hairs just before the target. Don't forget to dodge left and right a bit with the rudder! Around 2000 feet (by which time, you'll be moving maybe 400mph!), drop your load. Drop bombs a little short; rockets a little long. Then, yank back on the stick and drop the flaps, with maybe a little evasive left-or-right; retract the flaps when your nose rises above the horizon; get back up above 5000 feet as quickly as you can without slowing much below 150 - and watch out for air cover while you're going so slow.

IV. TAKING OFF, LANDING, AND GROUND MANEUVERING QUESTIONS.

Tip 1: To take off go to full throttle by holding down the "+" key. Around 50 knots, start pushing down on the nose, such that you're level with the horizon. Unlike P-51, you needn't worry about prop strike. Around 80 knots, ease back slightly on the stick. Hold your attitude, with the horizon about 1" beneath the cross-hairs, and wings level. Flaps are not necessary for takeoff, but help one after taking off from a carrier, if one didn't use the entire available runway for takeoff (such as a sloppy landing, then starting a takeoff mid-point on the carrier deck).

Tip 2: To land normally on any surface, the idea's to maintain a constant attitude, keep wings level, modest sink rate (vertical-speed indicator unstuck), and maneuver as little as possible. Lower gear and flaps when the runway's still less than a centimeter large; don't rush things. Reduce power to 30-40%, and aim for a touchdown airspeed of 80 knots. Keeping the nose about an inch above the horizon will do this for you. Use pitch to control the rate of descent, adding not more than 20% power, as necessary. Right before touchdown, hit the "M" button, to kill your engine (unless you have engine damage--you might not be able to restart for a go-around). After touchdown, lower the nose until it's level with the horizon, and hit the space bar for braking.

"Tactical" landings (under fire, Zeros behind you) require a bit more skill, but can be done flaps-up, abeam the carrier, in a circling approach. Work at it!

Tip 3: Use the rudder to line yourself up with the runway, when

landing, rather than ailerons. This will keep your plane level but still allow you to move left and right. If you have a Gravis Mousestick, try the setting the other two buttons to control the rudder. Note that, unlike a real airplane, the rudder in Hellcats doesn't raise the leeward wing any.

Tip 4: To land on a carrier you must catch an arresting wire. They are on the back half of the carrier. That is the side with the numbers. The tower should be on the right. Using flaps will give a steeper decent. If you miss the wires, gun the throttle and try again. Don't land on a damaged carrier. If you do, reload quickly, and take off quickly or you will go down with the ship!

Tip 5: How to land on a listing carrier: Land like you usually do, but keep the Hellcat on a horizontal plane *with* the listing carrier and use the rudders to maintain your heading and position relative to the horizontal plane of the carrier.

Tip 6: If you are damaged you have 3 options in landing. You can attempt a disabled landing, a ditch (water landing- make sure gear is up), or bail out. Landing is the preferred option since you will keep the plane and get mission credit. Bailing out loses the plane, and mission credit. Also if you successfully land, you are much more likely to live than the other two options. Bailing out is the most risky.

Tip 7: You can't ditch w/ your gear down.

Tip 8: If you're screwing up the approach, don't despair: full power, clean up (gear up), raise the nose, and go around.

Q: I can't turn around tight enough, especially after landing on a carrier.

A: Hit the down-arrow once, so you can see where you're going. Then, hold down the brakes and apply full power. Steer with the rudder keys. When you're headed in the right direction, release the brakes, pick up 10-15 knots, and cut the engine again.

Q: Can you land on the bridge in 'Bomb Base?'

A: Yes. It has been done. However, watch out. The bridge is in enemy territory. Many pilots report that if they come to complete stop on the bridge or near it, then they are captured by the Japanese.

Q: Why is it so easy to crash on landing contrary to what films show of actual landings from WWII?

A: PC Flight simulators, no matter how good they are, are not very good "visual" simulators. They have lousy input devices, and lousy displays. You lose virtually all the cues that are normally available to the pilot (ground texture, grass, nearby structures, sounds, motion), and are looking out a window with a 90 degree peripheral field of view, without chang-

ing views--45 degrees on both side of the centerline (compared to around 180 degrees in a real airplane). So there's a significant difference in HOW the airplanes are flown; comparing this to the real thing just won't work. But note that Hellcats has one of the best "in-envelope" flight control models around; if you're consistently landing, best look up the landing sections in the manual, or work through the FS 4.0 tutorials. The "tail-dragger" aspect of Hellcats has little to do with effectively landing the airplane.

In a nutshell, make sure you are straight and level when you land the plane. Make sure your Artificial Horizon instrument indicates that you are parallel to the ground. Once you get the hang of it, it is pretty easy. Fly--don't mush--onto the ground.

V. SCENARIO-SPECIFIC TIPS

Tip 1: In 'Flattop' where you take off from a field and try to sink a carrier, I've found that the most effective technique is as follows:

1. Fly directly north (? or whatever the direction the runway is pointed) at 50-100 ft. altitude till you get to the ocean.
2. Turn left and fly directly at the midsection of the carrier (again as low as possible about 50 ft.).
3. Fire the machine guns constantly, spraying the carrier as you approach.
4. At the last second, release the two bombs and pull up sharply to avoid slamming into the side of the carrier.
5. Get the hell out of Dodge.
6. Gun down the Japanese plane while returning to base.

Tip 2: In 'Flattop,' the enemy fighter is going after your cruiser. Kill it before you attack the enemy carrier, it's an easy 500 points.

Tip 3: In 'Bomb Base' and 'Capture Island,' after bombing the runway its possible to take out the AAA batteries on either end of the enemy runway, after which you can strafe the airfield to your heart's content.

Tip 4: In Bomb Base you get credit for shooting the planes that are on the ground.

Tip 5: In 'The Duel,' Try to hit one or both of the leading Zeroes as you go into them head on, and even if you miss, go after them immediately, otherwise they'll ignore you and go straight for the carrier.

Tip 6: In 'The Duel,' after you've shot down all the Zeroes, follow the other Hellcat to the enemy ships, and wait for him to bomb them,

after which you can finish them off.

Tip 7: In 'Divine Wind,' keep an eye on long range radar after the fourth or fifth Zero...if there is no others in sight, land and reload as quickly as possible, as a whole bunch more will show up, and you'll need the ammo.

Tip 8: Another fun HotP thing to do: In "Flying Fortress" mission, when returning, let the B-17 get well ahead of you (10 miles or so) and configure your Hellcat to fly strait-and-level. Then use the "e" cheat to see what the "enemy" sees. What you will see is the bomber base and final approach and landing! Keep swapping back-and-forth to be sure that your Hellcat is doing what you think it's doing. Then, you can land, refuel, and take off and go try to sink both ships that where near the island!

Tip 9: In 'Flying Fortress,' fly ahead of the B-17 on the way there, and behind it on the way back.

Tip 10: Engage the enemy bomber in "Scramble" from above and to the front. You can usually get him smoking on the head-on run.

Tip 11: In 'Scramble,' one way to minimize exposure to the gunners is to attack in a steep dive from 4 or six o'clock--there is a gap in the coverage there.

Tip 12: Another approach to the bomber in scramble is to fly very fast at about 100 feet until almost (<1/3 mile) directly under it, then pull up and roll around. You'll be approaching it from slightly behind and almost directly below it, giving you about 10 seconds of good shot time and putting you directly behind it after the maneuver.

V.I Leyte Gulf Scenarios

Tip 1: In 'Scramble 2', there's one Frank practically on top of you as you take off; make an honest effort to tag him once (try a fast 180 to the left off the runway tip, underneath the Lightning), but be quick to leave him to the Lightning as you race south-south-east to catch the bombers.

They have a close-cover Frank as well; if you fly in the treetops, he may not notice you (unless you've spent too much time playing with the first Frank, or unless that one follows you radioing your position!). Stay down with the squirrels until you pass under the two bombers, then pop up in a no-flaps Immelmann. You'll be right on the bombers' tails, and the escorts will be way ahead and out of the action for a fair time. If you're good with rockets, especially from an inverted firing posture, you might be able to drop both bombers while the Frank is turning back!

Tip 2: When there are lots of enemy planes (like in Texas Tea), keep flying in circles and fire at all enemy planes. Don't try to go after one plane unless there are no other enemy planes nearby, because as soon as you get in a straight path, the other planes will get behind you and kill you. Just fly around and smoke most of the planes before you start

going after individuals.

Tip 3: In the Lightning Strike scenario, you can score a lot of kills by ignoring the Japanese carrier and escort - instead, focus on downing all the Zeros and Franks that come after you. I've downed 6-8 Japanese fighters in this scenario using this carrier avoidance technique.

Tip 4: In "Texas Tea": East of that airfield, just north of a mountain, there is a small enemy encampment(?) at one end of a road - some buildings but no AAA. Refueled, returned, and rocketed the buildings then followed the road at treetop level. It wound north for several miles. Saw no traffic on the road :(but did encounter 2 Zeros :). Not sure where their base is. Flamed them and kept following the road. It ended up veering west and running to the coast and ended in another - you guessed it - unarmed encampment!

VI. SCORING/GENERAL GAME QUESTIONS.

Tip 1: Make sure the "Triple Time" setting is turned off if you are trying to attack targets.

Tip 2: The first time you play a new copy of Hellcats it will take about a minute to "build instrument panel". This needs to be done only once, but makes the file bigger. If you decide to play a game with a different number of colors, or a different screen size, it will also construct the instrument panel and get bigger.

Tip 3: If your Hellcat is on fire and you have no control, *bail out*!

Tip 4: Command T is the triple time option. It makes the game go 3 times as fast when you are over 500 feet. It is good for long trips to bomb a base.

Tip 5: You have enough ammo to fire for 45 *continuous* seconds. It is best to fire in short bursts. The manual suggests 2 to 3 seconds. You can re-arm and refuel when you land. You must be at a full stop (brake with space bar), and your engines must be off (hit "m").

Tip 6: Be careful using the autopilot down close to the deck. If you've damaged the Zero, and there aren't any more in range, the autopilot will release when it crashes. If you happen to have the controls "hard over" in some way, you could crash yourself before you realize what's happening.

Tip 7: Change the Gravis joystick's settings so that instead of the gear and flaps on the base's buttons, place the throttle controls there. It makes the plane a lot easier to fly with the speed controls handy. If you are right handed, the flaps and gear are easily accessible on the left side of the keyboard.

Tip 8: The biggest mistake people make in all flying games is to simply cruise around with the throttle wide open all the time. Use your throttle wisely. Drop down to about 80% once you get behind the bogey and shoot that sucker out of the sky!

Tip 9: When your machine crashes during a landing, or your aircraft gets flamed or something like that, just hit <Esc> and end (or is it abort) mission. You will then survive keeping the points from previous missions, plus what you have added to your permanent score on the current mission. This does not work if you get hit direct by a bullet though. Then you're dead immediately.

Tip 10: The north west quadrant there are several strange, small, islands and a field right in the middle of the sea.

Tip 11: Most of the Missions (except "Divine Wind") are of short duration, compared to your fuel capacity. Especially in the carrier missions you should keep your fuel at half and only make one pass at the target. Once you have eliminated fighter support, you can always land, refuel and rearm. This works great with "Bomb Base" and "The Duel". I keep my fuel at just over half for both and my takeoffs are easier. "Flattop" is also a good example. You should lower your fuel levels each time you fly a mission and see how close you come to "dead-stick"/BINGO landings.

Tip 12: Use "tablet" mode (from the Mouse control panel) for more mouse control.

Q: Is it possible to fly under the bridge?

A: Yes. It has been done. Upside down, and some have landed on the bridge.

Q: What's in the "off limits" area to the west in "Flight School"?

A: A lake with two sailboats enjoying a relaxing afternoon.

Q: What happens if you shoot or bomb your own carrier, base, other Hellcat, etc?

A: You usually get a warning that you destroyed a friendly unit when you land. After two more occurrences, you are discharged. In "The Duel" someone shot down Lt. Cmdr Herbert *and* sunk the carrier, then bailed out of my plane. He was given a court martial and executed.

Q: What is the highest score anybody has made?

A: The sky is the limit. That has not been recorded as of yet. That would be a little trivia. If you are a 'net-person' you could find out in comp.sys.mac.games.

Q: Has anybody successfully completed all of the missions without cheating, i.e., without using ResEdit to resurrect a dead pilot?

A: Yes. Many have.

Q: Are the planes in the training mission SUPPOSED to be shot down?

A: Yes. Please feel free to do so. You should decide to either practice bombing or downing the drones. The drones are good practice for attack angles. They are not that good in evasive situations and do not attack you. When you first load up with bombs in the training mission, you get six! You will only get two if you reload after that.

Q: Why, if you pause the Flying Fortress mission when the Hellcat is still in the hangar, does the B-17 still take off? This makes it a little difficult to catch up and protect it.

A: Well, you are pausing it for you. If you pause the game in 'Scramble' and pay attention to your radar, it does move. If you pause, it is wise not to pause that long. Pausing in the air seems to not have this same effect for some reason. It is best to have all your settings as you want them before you begin and saved.

Q: How does the collision detection work? Only in the middle?

A: This author is not 100% sure. But, it seems to be the way it works with naval objects. If it is the ground, then the first contact of your plane and the ground usually results in an explosion.

Q: Sometime in the play back, after crashing, it seems that the Hellcat literally falls in the sea the last few meters. What happens ?

A: Refer to the question above. The water seems to be treated as a transparent object to a certain depth. (sort of like what happens in REAL water) When you hit a certain depth after penetrating the water, the Hellcat will always explode.

Q: How is it possible to have enough fuel to go in the extreme north-west of the map (and see the north directional arrow)?

A: Don't forget the previously mention 'cheat' key. (ctrl-s) Also, this author has been able to do this on a full tank of gas at 70% throttle at Triple speed. However, I run out of fuel and cannot get back to a base. You can also Island hop. Pause the game, do command-m for map, and look for the nearest airfield. Most are friendly. You can fill-up, take off and reach an island closer to the directional arrow, then take-off again with full tanks, then return to that nearest island and fill up again!

Q: What happens if you jump and a plane hits you? Does the plane explode? Are you killed?

A: Well, when a plane hits, it has only happened to a few pilots as of this date, you die. The plane explodes. The same thing happens if you

run into a parachute from a Japanese pilot.

Q: Where is the second F6F Hellcat going in 'The Duel?'

A: The other pilot is heading toward the carrier. He usually runs into other Japanese pilots and they end up in a dog fight. If you follow your wing-man, then you are bound to end up in a dog fight.

Q: How much time has elapsed if you resume a mission after loosing the first Hellcat?

A: It depends. If you live, and are close to your base, not long. It is hard to tell since there is not clock or game timer which is visible. In 'Scramble,' if you lose your plane and you are close to the base and are found, it is not very long. You can usually see the other planes on radar when you are in your new plane.

Q: Can I hide from the radar from the Zeros or the Japanese ships?

A: Yes. You have to stay very low; you can see the effect when you fired on a Zero and somehow it disappeared from your radar at some point in it's fall. You just need to do the same. Stay up off the trees around 200-300 feet! You can do this if you are short of ammo and there are still Zeros around. Just make sure the Zeros are not in sight. Chances are that they can see you if you can see them.

Q: Why is my Hellcats program growing in size?

A: Each time you use it on a new size of monitor or 1/2 or 1/3 size, then Hellcats generates a picture of the cockpit and other stuff to match this size, and stores it in the program for faster redraws. So, for example, using it on a 21" monitor may add significantly to the program size.

Q: How can I visit or look around the Hellcats scenarios real quick?

A: There is a hidden command that put you in the 'Superman chair' and allows you to move all around at a great speed. Just type 'Control S' while playing. Your plane is now immobile, you can move it around with the key pad. for example, '7' to go up, '8' to go forward, '5' to stop. You can press repeatedly on the keys to accelerate, but be careful with the speed, it will lead you outside the game ! You can fire when in this mode, but the point will not be added to your score. if you try to bomb, that bomb will fall when you resume the game. Be careful when resuming the game, the plane will be nose DOWN and the engines will be OFF ! so remember to gain a lot of altitude! (ctrl-s will get you back).

VII. COMMON PURCHASING/MACHINE REQUIREMENT QUESTIONS.

Q: What is the current version?*

*(As of April, 1994)

A: Hellcats: 1.0.4.

Leyte Gulf: 1.0.2.

These versions incorporate the fix for the sound on AV and newer Macs. Updaters are available for older versions:

[ftp://ftp.hawaii.edu/mirrors/info-mac/game/com/
hellcats-102-to-104-update.hqx
leyte-101-to-102-updt.hqx](ftp://ftp.hawaii.edu/mirrors/info-mac/game/com/hellcats-102-to-104-update.hqx)

Q: Are there any scenery disks available?

A: "Missions at Leyte Gulf" should be released sometime in November. It will include additional enemy fighter types, different Hellcat weaponry, and additional scenery.

Q: What does HOtP stand for?

A: Well, it is the acronym for the game Hellcats Over the Pacific.

Q: What is the "ultra" cheat key?

A: Well, it depends on how you want to cheat. The 'e' key will give you the enemy's viewpoint. 'a' is the autopilot key, as you already know. 'ctrl-s', as you again know, is the speed key to travel all over the scenario at high speeds.

Q: How do I resurrect a dead pilot & modify other scores 'n' stuff?

A: There is a utility called 'Hellcats Rescue.' It will resurrect your pilot from his death. You may also edit your copy of Hellcats with Res-edit. See the section following, explaining how to do that. Don't use res-edit unless you have done so before and know how to use it correctly.

In order to really appreciate this game and earn rank ethically, most Hellcats pilots do **not** cheat.

Q: What hardware is needed to run Hellcats?

A: You need 2megs of RAM, system 6.0 or higher, and a microprocessor of 68020 or higher. The best machine to run this on is a Quaddra, fx, or a ci. It will work on others, but these are best. It runs much faster if installed on a hard drive. If you are using system 7, do **not** increase your virtual memory above 50% of what the real memory is or the game will be sluggish.

Q: Does it use color?

A: Once you use color, you will never want to go back to B&W. It is better to use color because you have *MUCH* better visibility.

Q: Is the flight simulation fairly accurate?

A: It is not perfect. Like most games, it is an approximation of a flight model, and this model is one of the most pleasant-feeling, "realistic" of any simulator on the market. However, there are artificial limits to the program: one cannot, for instance, stall the airplane (it always sorts of "mushes out"; nor is the ground model highly realistic (one can't lift off a carrier until one flies off the end, even if one has an abundance of airspeed). In some ways, it's a "fly-by-wire" aircraft, providing coordinated controls with a single input mechanism (the mouse). The rudder controls, by the author's own admission, were a last-minute addition, and aren't properly represented by the flight model.

Q: Does Hellcats run under System 7?

A: Yes.

Q: Can two or more people play using networked Macs?

A: No. The current version of Hellcats does not allow this. There is a new version *expected* to be released next summer that may incorporate network flying and combat.

Q: Does it support the creation of general mayhem on the ground, or can you only shoot down other planes?

A: Oh yes. You can take out AAA batteries, other aircraft, bomb hangars, and other ships. Many people report completing a mission and getting their mission award and resuming the mission to go back and take out the AAA batteries and any planes on the ground. The air combat maneuvering (ACM) component of Hellcats is MUCH better than any other PC-based combat simulator, including Falcon (2.2 OR 3.0).

Q: What kind of alternate input devices are available?

A: The Gravis MouseStick is the most popular input device. However, many users have found that the mouse is just as satisfactory, given the control model; others have found the ergonomics of the MouseStick to be unsatisfactory (it's more of a fingertip-device, than a grab-it device; thus, given the height of the stick, it's difficult to command full stick-back--which one's almost always doing in ACM).

Recently I got a device called "MACFLY". It is a gamestick for the Macintosh. The device plugs into one of the serial ports and doesn't require unhooking the mouse, in fact the mouse is still active. It has 2 trim wheels, two fire buttons, with the aid of a mode button it has multiple programmable settings, and best of all the stick feels like a real control stick. I should also note that the stick will also center itself. I like it much more than the Gravis stick and it has given me many hours of flying fun.

IZU Products Co.
Rt. 2 Box 3985
Lufkin, TX 75901
Phone (409) 824-3332
FAX (409) 824-3303

They will take your order by phone and I spoke to them by phone and they said it was OK to post their address. I have no financial interest in this product. I enjoy it a great deal and wanted to pass the info along.
(provided by: z_smarttpl@ccsvax.sfasu.edu)

VIII. EXERCISES

All of the following have been done.

- * Try to ditch and take off after a loooooong slide.
- * Try to land on an enemy carrier.
- * Fly and dogfight upside down.
- * Try to follow one Zero without killing it. (very good practice)
- * Try to land on the mountain, or a wounded carrier.
- * Bomb everything in flight training.
- * Place a bomb on the top of the control tower in flight training.
- * Bomb all the bases (friendly or enemy) on your map after completing 'Scramble.'
- * In 'Scramble,' take off with bombs and kill one Zero and the Betty. Let the other Zero go. Stay a good distance away and follow it on radar. See where it goes!
- * Fly upside down at 200 feet when flying over the runway at Henderson Field. Buzz the control tower!
- * Fly your plane, fully loaded with fuel and bombs, straight into your carrier or friendly ship. Bail out at 200 feet! See what happens!
- * Fly by the bunkers in 'Capture Island.' (The bunkers are the buildings on the beach, being shelled by the cruiser you have to fly around to get to your target.) See if you can see the doors.

- * In 'Capture Island,' try to get a bomb to hit the doors on the bunkers.
[use replay as soon as you know your bomb hit so you can see how it went].
- * Try to get right over the Beatty in 'Scramble.' When you are maintaining the same speed as the Beatty, try to maintain a height of about 100 feet above it. Push your down arrow twice to get a bottom view. You can sit there and watch as the Zeros try to shoot you down....they will put their machine gun fire into the Beatty! Also, if you are at LEAST 100 feet above the Beatty, you can drop a bomb right on top of it. As soon as you release the bomb, lower the flaps and go to full throttle and go vertical. By the time the bomb hits the Beatty, you should have climbed at LEAST 400-500 feet.
- * Fly under the bridge--inverted.
- * Land on the bridge.
- * Do a touch-and-go on the dock.
- * Land on the carrier the wrong way.
- * Miss the arresting wire, and complete a landing on the carrier.
- * See how little runway it REALLY takes to take off from the carrier. You'd be surprised.
- * Kill a Zero with a bomb.
- * You can land just as well on a carrier in either direction. In fact, it may even be a little easier to land in the wrong direction since the arresting wires are now at the far end instead of the near.
- * When landing either on the ground or on a carrier, it is easiest to make a fairly high speed, low altitude approach. Not only do you have more control, but since it happens faster, you have less chance of making a boredom mistake.
- * If you fly up to around 30,000 feet, the altimeter starts misbehaving - it registers negative feet! If you do a high speed dive from this altitude (full throttle), the plane will instantly reverse its direction and head straight up once you have gained enough speed.

IX. FTP ARCHIVE

There is an archive of movies of amazing Hellcats stunts that you may be able reach via anonymous FTP. Connect to [chemotaxis.biology.utah.edu](ftp://chemotaxis.biology.utah.edu), log in as "ftp", provide your email address as the "password". You'll already be in the "/Public" folder; look down into Hellcats_Feats/QT and see what you find. The site also has permission from Graphic Simulations to include movies of the soon-to-be-released F/A-18 follow-on to HellCats, and several beta testers have contributed. And, you'll find several Hellcat/Leyte-related applications there as well.

Below is a directory of

chemotaxis.biology.utah.edu/Public/Hellcats_Feats/QT

AquaTank.cpt by smills@umaxc.weeg.uiowa.edu

Hilarious montage of Island Storm tanks driving out onto the sea.

Bombicide.cpt by smills@umaxc.weeg.uiowa.edu

Hellcat kills self by dropping a bomb on itself.

BombRun.sea by Brian Williams (darkstar)

Two bombs being dropped on the deck of a carrier.

BombTheBomber.cpt by Tom Morrison (Tempest)

Two bombs being dropped on a bomber.

CarrierLanding.cpt by Tom Morrison (Tempest)

Hellcat landing on a Japanese Carrier.

Chappy takes 3 to Tango.CPT by Jonathan Chapman (Chappy)

Inverted plane passing under deck of carrier to drop a bomb and sinking the carrier upon dropping two more in the same spot.

ChappyGetsADrink.cpt by Jonathan Chapman (Chappy)

Plane passing sideways under water tower.

Chappy_Under_The_Bridge.cpt by Jonathan Chapman (Chappy)

Plane passing upside down under a dock.

FA18_buzz.cpt by anonymous

FA18 buzzing some buildings.

Hammerhead.cpt by smills@umaxc.weeg.uiowa.edu

Hellcat performing a hammerhead stall maneuver.

Inverted Bomb.cpt by smills@umaxc.weeg.uiowa.edu

An inverted bombing run on the training mission airfield.

LongMissileLead.sit by Earl Williams (earl@cognet.ucla.edu)

Missiles destroying a Frank.

Me&MyBomber.sit by Earl Williams (earl@cognet.ucla.edu)

Hellcat flying in unusual formations with a bomber.

NiceTryFrank.sit by Earl Williams (earl@cognet.ucla.edu)

Frank near-crash into a grounded Hellcat.

Scrape.cpt by schneide@ponder.csci.unt.edu

Hellcat buzzing the training airfield, scrapes the ground on its pass.

ShipRunAground.cpt by smills@news.weeg.uiowa.edu (MuffinHead)

Hellcat takes out a land cruiser.

StripDeck.cpt by Tom Morrison

Rockets stripping a carrier deck of all AA.

ThreadNeedle.cpt by Tom Morrison (Tempest)

Plane dropping bomb while passing under carrier deck.

UnderCarrier.sea by Brian Williams (darkstar)
An inverted plane flying under deck of carrier.

WhatWentWrong.cpt by Tom Morrison (Tempest)
You get to guess what went wrong with this landing.

X. CREDITS (For Hellcats FAQ/Hints by Ted Wagner)

Below are the names of about everyone who contributed. If you did contribute and your name is not below, your item was a repeat and I apologize. I used the first of each suggestion. I do wish to thank EVERYONE on the net who contributed either with wish-lists, suggestions, or just undying support to see the finished product.

I want to thank all of you. Without your help, this project would have taken several longer weeks than it has. Without all of your contributions, this never would have come about.

If I misspelled anyone's name, I apologize. I just cut and pasted names so they are spelled just the way they were when they were cut from the mail messages that were sent.

Howard Berkey
Wile E.
Babak Gohari
John Hirsch
Erik Hoel
Jim Hogue
Thomas A. Kephart
Steven John Knezevich
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Charles Lamonte
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Peter Newton
Povl H. Pedersen
Michel Pollet
Jon Pugh
Peter Rigsbee
Ramiro Sarmiento
James Stricerz
Mike Tanner
Brad Ward

X.I LEYTE GULF CREDITS

I hope I have everybody credited that provided information to make the Leyte Gulf additions a reality. I may have missed someone, and if I have, please send me e-mail and I will update the credits section. I am appending the version statements to the end of this document but leaving the current version of the document at the beginning.

I did pool some comments and suggestions into one tip where someone's comments supplemented another's comments. For those that I e-mailed for your permission to reprint your usenet comments, that is usually what happened (some of you didn't recall what you said). So, many of your comments were all pooled together and some smoothed out the edges of others.

In version 2.0, I tried to take the first person 'I' out. I may have missed some as this is becoming quite a document.

Subsets will continue to be a part of this Hellcats FAQ for Leyte Gulf. However, if there are more and more contributions as there were for Hellcats, a separate document will be created.

Contributors:

Ron Guest
Eric Lucas
Jose Antonio Basto
James Preston
Dan Walkowski
Ty Willis
Povl H. Pedersen
Stephen W. Evans
fischer1@student.msu.edu (Patch tip)
Homayoon Akhiani
Glenn Schneider (Patch tip)
Babak Gohari
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Chuck Welsh
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Jose Luis Beine
Michel Pollet (Patch Tip)

XI. CHEATS

It is hard to 'cheat' per se. We have already discussed the 'e,' 'a,' 'ctrl-s,' and 'command-t' keys. We are now getting into more sophisticated cheating. Most game pilots don't do this. Please be warned again, if you have *NOT* used Res-edit before, please do not try this stuff. If you still want to try, MAKE SURE YOU MAKE A BACKUP COPY AND EXPERIMENT ON YOUR BACKUP COPY!

To resurrect a pilot:

For the ResEdit-headed, the 'HEL1' resource contains the pilot data. The first resource ('HEL1') is unrelated to the second one (I forget the ID's, but they do have names).

In any event, the HEL1 resource containing the pilot data is a list of 20 records 64 bytes each. The first 32 bytes seem to be reserved for the pilot's name. These are Pascal-style strings with a preceding length-byte. The 32 bytes of data following the space reserved for the name appear to be

shorts (integers of 2 bytes in length each). The first word is whether you are alive or dead (0=alive, 1=dead). Changing this to 0 can resurrect the dead pilot.

The integers that follow are rank, # of fighters downed, bombers, etc. There are a few bytes in there that appear to do nothing. Some seem to increase your score but have no mention of how or why (perhaps reserved for subs and other targets in future scenarios). The rank can go from 0-5, the others don't appear to have a cap. Explore, have fun.

The score is not stored in the resource - instead it appears to be calculated on the fly based upon # of various targets you've downed. Rank, however is not calculated.

(Information from by John Calhoun)

Q: Is there a Hellcats patch?

A: Yep. However, this author does not support patches ethically. Again, this is a first rate game. It is worth buying. You won't be sorry if you do. I know some do not want to wait for their unlock code and still want it for that reason. What's the big deal with waiting 2 weeks? It *is* a pain. But, I think if we get high quality games like this one, we should support the efforts of the programmer and his company or distributor.

X.I Leyte Gulf Cheats

Tip 1: If you want up to 255 missiles in the new Leyte Gulf module of Hellcats over the Pacific, the following must be done:

Using a sector editor open up the "Leyte Gulf" application and search for the following (in HEX):

48E7 0080 7006 and replace the last 4 HEX (the 7006 part) with 70FF

WARNING: The FF says you want 255 missiles, one can also use any other number, such as 20, 3F, 60, 1F, etc.. Notice it was "06" to begin thus you were given (before patching) 6 missiles. The *risk* you take is that Hellcats subtracts mass from your airplane every time you fire a missile, lose fuel, or drop bombs. So, after launching about 70 missiles, your plane's mass will become near zero, and funky stuff starts to happen. My advice is set it so that you start with the ability to shoot 40 missiles or so. The only problem with this patch seems to be that one needs to have their preferences configured so that the "Rockets(6)" button is turned off when one is prompted with the dialog containing it. Then, turn it on and the patch becomes functional.

Tip 2: You can make a patch for missiles with Res-Edit:

- 1) open Leyte gulf (a copy) with resedit.
- 2) open the "code's" resource.
- 3) open code id=4.
- 4) at location 000F08 is the hex string 48E7 0080 7006. The patch is to change the 06 to anything between 00 & FF.
- 5) save and quit.

Be careful with large amounts of missiles. I added 40 rockets to my arsenal and couldn't take off from the carrier in DEEP TROUBLE. I was able to take off with sixteen, but the rocket indicator goes off so one never really knows how many rockets are left. (Glenn Schneider)

Tip 3:

I tried the patches above and they have the drawback that you don't really know if you have those missiles or not.. I change that patch, and now the check box is 'real' ;-)

The original patch was

CODE id 4, offset 0xF08 : change 48e7 0080 7006
with // // 70xx where xx is the right
number.

If you also change
offset 0xEE0 : change 7000 0080 7006
with // // 70xx same xx as before :-)

the check box will works all the time. (Michel Pollet)

***** DISCLAIMER ON PATCHES *****

In no way does the author of this FAQ condone the use of patches to change the original composition of the program. All patches above are provided at the request of readers and of contributors. The use of patches alters the intended content of the program and is ethically questionable to a growing sector of game players and programmers.

If you use a patch, do so at your own risk. If you don't know how to use editing programs correctly, you could permanently damage or ruin your copy of Hellcats and/or Leyte Gulf.

This disclaimer is provided after a few concerns were raised by contributors and readers of the FAQ. The inclusion of patches in future FAQ's is in doubt at the present time. Out of respect of Eric Parker, the Hellcats creator, all patches may be eliminated in future versions of this FAQ.

XII. FAQ BACKGROUND (By Ted Wagner)

I saw a lot of questions on this game and felt that a FAQ/Tip document would be useful. This document is not intended to replace the manuals. It is meant to enhance the novice HOtP gamer's pleasure and skill in the game.

I fully support all efforts to complete the missions without cheating and to buy this product from Graphic Simulations or a software retailer or mail order company.

Hellcats Over the Pacific FAQ/Tips was created with the HOtP

enthusiast in mind. It is my hope to expand this document in the future to accommodate the new scenarios to be released in a few months and the new Hellcats version next summer. This document will include FAQ's, Tips and Hints while playing this game, easy 'cheat' methods, neat stuff to try or see, and an appendix with a list of all the gracious people who were instrumental in the completion of this document. A couple people had sent some reproductions of the HOtP manual typed by hand. Thank you for your contribution, however, I cannot print what is in the HOtP manual without permission from the author. (And besides, as I will mention many times, this is a game worth buying...if you buy the game, you have the manuals.)

I hope this document is useful to everyone who reads it. If you have any suggestions for changes to this document, please e-mail me at the address above.

I tried to get everything in here that everyone sent. This will grow in the future, there is no doubt about that! Some of these look like redundant questions. Some of the hints, tips, and FAQs do look the same...but are subtly different. I left it that way because of the way people read and understand things. Some things click for some people, some other things click for other people.

This was a rather rushed job as I completed this while on vacation here between August 13-August 26, 1992. The updated version which will be released this fall will promise to be a bit more organized with sub-categories beneath sections. This should make it much easier to find things.

If you get the new scenarios or just have some stuff to add that is not included in this document, please e-mail me at the address at the top of this page.

Technical Notes: (Added by Robert Dorsett)

1. It's not possible to out-turn the Zeros *in plane*, per se--merely *out-maneuver* them. It's an important difference. Due to the control logic, they don't react quite like a real pilot should, when one tries out-of-plane maneuvers.
2. On bombing, you don't need to be much below 2000' to both release and climb out, even if you're 90 degrees down, and have got the airspeed indicator pegged. It is suicide to try to slow down after dropping: use your excess airspeed to get away from the ack-ack batteries as fast as possible, or climb beyond their effective range (fast!), and come in for another run.

*****IMPORTANT NOTICES*****

****Contributions****

For those pilots who are consistent at winning in Leyte Gulf OR feel comfortable about making suggestions, please send in your contributions to me at your own speed. Leyte Gulf hints will be added to this document. At a later date, OR if there are a deluge of contributions, a separate FAQ/Hint document will be created solely for Leyte Gulf.

****Future additions and versions of Hellcats****

If you can write to Graphic Simulations or Eric Parker, please do so!!
This game has terrific potential for expansion in several directions.
Please support both parties in possible upgrades of this game. Who
knows, if we are loud enough and supportive enough, Hellcats may feature
several scenarios, many different aircraft to choose from, and
internet and/or AppleTalk networking capabilities!

Version Notes:

Version 2.4 UPDATE Sept 28, 1993 (Two maneuvers to use against
multiple opponents)
Version 2.3 UPDATE May 31, 1993 (HellCats Feats FTP archive, basic mouse use)
Version 2.2 UPDATE April 27, 1993 by Ted Wagner
(Leyte Gulf additions, Disclaimer on Patches, addition to
notices)
Version 2.1 UPDATE April 6, 1993 by Ted Wagner (Leyte Gulf additions)
Version 2.0 UPDATE March 15, 1993 by Ted Wagner (New Leyte Gulf version)
Version 1.5 UPDATE January 7, 1993 by Ted Wagner (Note on Leyte Gulf)
Version 1.4 UPDATE December 13, 1992 by Ted Wagner
Version 1.3 UPDATE November 7, 1992 by Robert Dorsett
Version 1.2 UPDATE September 1, 1992 by Robert Dorsett