## CONTENTS

**INTRODUCTION**

CAMPAIGN

SURVIVAL / QUICK GAME

SETTINGS

CARRIER INTERFACE

FLIGHT DECK

HANGAR DECK

**FLIGHT DECK OPERATIONS**

- Moving Aircraft
- Fueling Aircraft
- Arming Aircraft
- Launching Aircraft
- Landing Aircraft
- Cargo loading/unloading
- Tractors
- Elevators
- Repairing Aircraft
- Flight deck crew

**COMBAT OPERATIONS**

- Search Missions
- Intercept Missions (AIR, SUR, SUB)
INTRODUCTION

*Carrier Deck* is a real time management game where the player takes the hot seat aboard a US Aircraft Carrier. Playing as the “Air Boss” aboard the USS *Ronald Reagan* (CVN76), all air operations and control of the flight deck are your responsibility.

The USS *Ronald Reagan* will be deployed to various hot spots around the globe and engage with forces determined to sink the aircraft carrier.

Enemy threats need to be detected and then intercepted, failing which the carrier will take damage and ultimately sink.

CAMPAIGN

The carrier starts with training exercises (tutorial) in the North Atlantic and progresses across the globe ending in the North Pacific.
Clicking on any of the unlocked theaters opens up the missions screen. All missions need to be completed before the next theatre is unlocked. Each mission performance is rated out of three stars and rank awarded according to the players cumulative performance across the globe.
SURVIVAL / QUICK GAME

The player can select the level of difficulty and then proceed to play either Survival Mode or a randomly generated mission.

Survival Mode is a race against time, attempting to keep the Carrier afloat for as long as possible.

SETTINGS

The player can adjust Game, Video and Audio settings.
In Carrier Deck everything is color coded and the primary colors are:

- FLG FUEL/FLEET LOGISTICS
- AIR AIRCRAFT
- SUR SURFACE SHIPS
- SUB SUBMARINES
- CAS GROUND TARGETS
- EWA ELECTRONIC WARFARE
- SPE SPECIAL FORCES
- AMP AMPHIBIOUS OPERATIONS
- RES RESCUE
The flight deck of the CVN 76 has a number of components:

1. **Aircraft launch point**
   All fixed wing aircraft take off from any of the four of these points

2. **Elevators**
   Elevators transport aircraft between the Flight and Hangar decks, there are four of them

3. **Meatball**
   These lights flash/change colors to assist the player in landing operations:
   - Static green: Runway clear for landing
   - Flashing red: Aircraft about to land
   - Flashing yellow: Aircraft landed but still on runway
4. **Conning Tower**
   Clicking on the conning tower changes the view from the flight deck to the hangar deck

5. **Cargo / Large Aircraft parking bays**
   Any aircraft can park in these bays, but larger aircraft can only be fueled and armed in these bays. In addition, cargo can only be unloaded in these bays. There are two Cargo/Large Aircraft bays.

6. **Helicopter launch/landing points**
   All vertical take-off aircraft launch and land at one of these three points

7. **Aircraft landing strip**
   All fixed wing aircraft land on the strip

---

**HANGAR DECK**
1. Cargo bays
   When cargo is received on the Flight Deck, they are transported by the tractors and unloaded at these cargo bays.

2. Parking/Repair bays (large)
   Any aircraft can park in these bays, but larger aircraft can only park in one of these two bays. In addition, the larger aircraft parked in these bays are automatically repaired, if damaged.

3. Parking/Repair bays (regular)
   All regular sized aircraft can park in these bays. Aircraft parked in these bays are automatically repaired, if damaged.

**FLIGHT DECK OPERATIONS**

Enemy targets will be identified on the RADAR (see below) and the player will need to queue intercept missions, fuel and arm the relevant aircraft and then launch and recover the aircraft.

**MOVING AIRCRAFT**

Left clicking on an aircraft selects it and all possible locations that the aircraft can move to on the carrier will then be highlighted with flashing icons.

Left clicking on any of the icons will move the aircraft to that location and then unselect the aircraft.
**FUELING AIRCRAFT**

Left click AND holding on an aircraft will bring up the selection radial. Moving the mouse over the FUEL icon (purple) then releasing will queue the order for the crew to fuel the aircraft.
The rotating edge indicates that the crew are inbound to the aircraft to perform the instructed action. Once they have reached the aircraft, the icon will fill indicating the progress to completion.

The shading on the aircraft will turn PURPLE once the crew has finished refueling the aircraft.
**ARMING AIRCRAFT**

Left click AND holding on an aircraft will bring up the selection radial.

Moving the mouse over the relevant ARMING icon then releasing will queue the order for the crew to arm the aircraft for that mission type.

The shading on the aircraft will turn to the color of the selected mission type once the crew has finished arming the aircraft.

**Whenever an ARMING instruction is issued to the crew, they automatically also queue a FUELING mission.**
**LAUNCHING AIRCRAFT**

Left clicking on an aircraft selects and then by Left clicking on an aircraft launch point will move the aircraft to the catapult/heliport.

Once at the catapult/heliport the launching icon will appear, only if that aircraft is the next mission queued in the OUTBOUND BOX (see below).
Left clicking on the launching icon will launch the aircraft.

If the aircraft selected is not the next mission queued in the OUTBOUND BOX, the following icon will appear.

**LANDING AIRCRAFT**
Fixed wing aircraft coming in to land appear in the INBOUND BOX. Selecting the aircraft in the INBOUND BOX will in the landing icon appearing.

Left clicking on the landing icon (1) will commence the landing procedure.

For vertical landings, any of the three heliports (2) can be selected, otherwise the aircraft will default to an open heliport.

**CARGO LOADING/UNLOADING**

The carrier receives cargo shipments and these need to be unloaded and taken to the hanger deck. Aircraft carrying cargo will have a cargo icon above them and can only unload in any of the two Cargo bays (1).

Moving the aircraft to a Cargo will automatically unload and trigger a tractor to come collect the cargo.
Once the Cargo has been unloaded, the Cargo plane has to leave the carrier and an outbound mission is automatically created and put into the outbound queue (see Mission types below).

**TRACTORS**

Whenever cargo is unloaded on the Flight deck, a tractor will automatically be tasked with collecting and moving it to a Cargo bay on the Hangar deck. The tractor will collect the cargo and move to an elevator and wait for that elevator to be moved to the Hangar deck.

![Image of a tractor on a ship]

Upon reaching the Hanger deck the tractor will move and unload the cargo on its own accord.

Once the Tractor has unloaded the cargo it will move back to an elevator and wait for that elevator to be moved up to the Flight deck.

Upon reaching the Flight deck, the Tractor will move to its parking bay and await the next cargo shipment.
ELEVATORS

Elevators are controlled by the transparent icon situated close to every elevator on the Carrier.

Selecting the icon will either send the elevator up or down, depending on its current position.

REPAIRING AIRCRAFT

Every time an aircraft takes-off on a mission, it will incur wear and tear.

When an aircraft is at 70% or less of combat ready it will begin to emit smoke.

The further it falls below 70% the more smoke it will emit.

When an aircraft is below 70% combat readiness, there is an increasing chance of malfunction either on take-off or landing.
Whenever any aircraft is moved to a parking bay (1) on the Hanger deck, repairs (if necessary) will commence automatically and the combat readiness of the aircraft will be restore to 100%.

Large aircraft can only be repaired/parked in one of the two larger aircraft parking bays (2).

**FLIGHT DECK CREW**

The flight deck crew are purely decorative in the game, adding atmosphere and immersion.

The crew will fuel and arm aircraft, fight fires and fix damaged equipment.
1. Outbound Mission Queue
2. Launch zone
3. Search Mission initiators
4. Combat channels
5. Inbound Mission Queue
6. Landing zone
7. Enemy Operations

All aircraft will commence their mission from the Outbound Queue and progress towards the right in one of the Combat channels and then enter the Inbound Queue to land.

Enemy threats progress from the opposite direction and inflict damage on the carrier if they reach the left hand side of the Combat channel.

Enemy threats approach the carrier in the channel corresponding to their color of operation, for example enemy aircraft will approach the carrier in the red Combat channel and enemy submarines in the yellow Combat channel etc.

The player needs to detect (search mission) enemy threats and then launch missions to intercept the enemy before they reach striking distance from the carrier.

All enemy threats are automatically detected when inside the range of the carrier’s onboard radar, which has a limited range. In order to extend the range of the radar, search missions needs to be launched. Once a search mission has been launched, enemy threats are detected at longer ranges (depending on the aircraft type chosen to conduct the search mission).
Each Combat channel requires its own Search mission to extent the detection range for that type of target, for example you need to launch a submarine search mission to extend the detection range for submarines and separate search missions for enemy air and surface extended range detection.

Only certain types of aircraft can conduct specific types of target detection, for example only the Seahawk and S3 Viking aircraft can search for submarines.

In addition, each type of aircraft that can search for enemy threats has a different detection range at which they can detect the enemy.

For example the S3 Viking is a medium range search aircraft and the Seahawk a short range search aircraft.

1. Carrier detection (automatic)
2. Short range detection
3. Medium range detection
4. Long range detection

When a search mission is launched into a Combat channel, the color bar is removed to the corresponding detection range of that aircraft, thereby giving earlier detection to the player.

For example, below an aircraft with long range aircraft detection ability and an aircraft with short range submarine detection have been launched, with no surface search mission being launched.
Search mission reduce the length of the color bar which hides the enemy threats as they progress from the right hand side towards the carrier i.e. the shorter the bar the sooner the enemy threat becomes visible.

**SEARCH MISSIONS**

To sequence to launch a search mission is as follows:

Select the aircraft you wish to send on the search mission.

Left click and hold to bring up the radial and select what type of enemy threat the aircraft will search for, in this case enemy aircraft threats.
Click on the aircraft search button.

Click on the aircraft (1) until you get the aircraft type that matches the aircraft you want to send on the search mission (EC2 Hawkeye) then click on the queue button (2) to put the mission into the outbound queue.
The search mission is now in the outbound queue and the aircraft is fueled and armed to search for air threats.

Select the aircraft and move it to a launch point. Click on the launch icon to launch the aircraft.
The aircraft is now airborne (1) and the search mission has commenced. The aircraft will now move from left to right towards the inbound box to land and whilst in flight will detect any enemy air threats (2) at long range, the red bar has been removed exposing enemy air threats (3).

Once the aircraft has landed, the search mission will be over and the red bar will once again cover the enemy air channel until such time as another search mission has been launched.

In order to ensure all enemy threats are detected, multiple search missions need to be launched into the three enemy channels, namely air, surface and submarine.
INTERCEPT MISSIONS (AIR, SUR, SUB)

The sequence to launch an intercept mission is as follows:

A detected enemy threat is required before an intercept mission can be launch, in this case two enemy submarines has been detected by a S3 Viking on a search mission.
Click on the enemy threat, a selection box appears on the threat (1) and a mission request is automatically created in the outbound box (2).

Left click on the aircraft in the mission request (3) until you get to the image of the aircraft you wish to execute the intercept mission, in this case two Seahawk helicopters. Click the QUEUE button (4).

The intercept mission now appears in the outbound box (1) and an adjusted box (2) now appears on the enemy threat to indicate an intercept mission has been assigned to it.
Arm the necessary aircraft to perform the intercept mission, in this case two Seahawk helicopters need to be armed for an anti-submarine mission.
Once fully armed and fueled, launch the intercept mission.

The intercept mission (1) will now appear in the combat channel headed for the enemy threat, which now has a target icon (2) to indicate the intercept mission is in progress.
Once the intercept mission reaches the enemy threat, the threat is eliminated (1) and the aircraft continues on the channel towards the inbound box to land (2).

**ELECTRONIC WARFARE MISSIONS (EWA)**

Whenever an enemy threat (1) needs three or more aircraft to intercept/attack it, the mission needs to be preceded with an electronic warfare aircraft mission.

The EWA mission (2) automatically appears in the outbound box when such an enemy threat is selected and the aircraft to be used can selected in the same way as selecting the intercepting aircraft i.e. by clicking on the aircraft (3). The EWA mission has to be launched before the intercept mission can be launched.
To prepare an aircraft for a EWA mission, click and hold to then select the EWA arming option. Then ensure you have sufficient intercept aircraft armed and ready. Then select the Queue button to launch the combined intercept mission.
GROUND ATTACK MISSIONS (CAS, AMP, SPE)

Ground attacks differ from AIR, SUR and SUB missions as they do not need to be detected.

All ground targets are automatically detected and show up in the bottom radar channel.

There are three types of ground targets:

1. Missile sites, requiring a CAS (Close air support) mission to destroy it

2. Radar sites, requiring an AMP (Amphibious op) mission to destroy it

3. Unknown target, requiring a SPE (Special Forces op) to reveal it first

Ground targets (1) do not progress towards the Carrier, but try lock on with radar (2).

If the radar lock reaches the Carrier, the ground threat will inflict damage on the Carrier.

Intercepting these type of targets are in every other respect the same as intercepting other type of enemy targets.
LOGISTICS MISSIONS (FLG)

The carrier is constantly receiving cargo as well as aircraft replacements and new additions.

AIRCRAFT REPLACEMENT AND ADDITIONS

These aircraft appear AIR channel and progress towards the inbound box to land.

Once landed on the carrier the aircraft will operate in the same manner as any other aircraft.

FLG missions always appear in the AIR channel.
CARGO MISSIONS

Cargo carrying aircraft approach the carrier in the AIR channel and have a cargo icon attached.
Once landed on the carrier, a cargo icon above the aircraft will indicate it is carrying cargo.

Select and move the aircraft (1) to any one of the two cargo bays (2).
The cargo will be automatically unloaded. The aircraft will refueled automatically and the outbound leg of the cargo mission will appear in the outbound box.

The tractor (1) will come and collect the cargo.

When the aircraft is refueled, move it to a launch point and launch it.

**RESCUE MISSIONS (RES)**

Whenever an aircraft is shot down or crashes on take-off or landing, a RES mission (1) is automatically created in the outbound box.

Aircraft take damage with every mission and will need to be sent to the hangar deck for repairs. As aircraft take more damage, smoke will be emitted from them, indicating that repairs are needed. Damaged aircraft are more prone to crash on take offs and landings.
RES missions are a priority mission and therefore jump to the front of the outbound queue.

Whenever an aircraft is lost, a replacement (2) is automatically sent to the Carrier.
LAUNCHING OPERATIONS

All aircraft launching operations begin in the outbound box.

Whenever a mission is initiated, it will appear in the outbound box (1). All aircraft have to be assigned a mission in the outbound box before they can execute a mission.

No aircraft can be launched unless it has an assigned mission AND is in front of the Queue in the Outbound Box.
Multiple missions (1) can be queued but the launched have to take place in sequence.

The aircraft first in the queue (2), indicated by moving chevrons, has to be launched before any of the following aircraft can be launched.
Any mission (except a RES and FLG missions) can be cancelled from the outbound box by selecting it (1) and the clicking on the cancel button (2).

LANDING OPERATIONS
All aircraft landing operations begin in the inbound box.

Whenever any aircraft (1) reaches the end of a channel, they will enter the inbound box.

When aircraft enter the inbound box, they split into either the fixed or the rotary landing channel. Fixed wing aircraft that require a landing strip enter the fixed channel and helicopter/aircraft that land vertically enter the rotary channel.

**FIXED WING AIRCRAFT**

When a fixed wing aircraft enters the inbound box, it will progress to the landing zone (1) and upon reaching the landing zone will automatically commence landing onto the flight deck.

Landings are done in sequence and the aircraft in the front has to land before the aircraft following will be able to do so. The lead aircraft is highlighted in gold (2).
A fixed wing aircraft can commence landing onto the flight deck before reaching the landing zone. This is achieved by clicking on the front aircraft (2) and then clicking on the landing icon (3) on the flight deck.

An aircraft can abort the landing by clicking on the front aircraft (2) and then clicking on the ABORT icon (4).

If a landing is aborted, the aircraft will crash and a RES mission will be created.

Once an aircraft has landed, it needs to be moved from the landing strip before the next fixed wing aircraft can land, otherwise a crash will ensue.

An alarm will sound until the landed aircraft is directed to a parking bay.
**ROTARY WING AIRCRAFT**

When the lead rotary wing aircraft (2) reaches the landing zone (1) it will automatically commence landing on the flight deck and automatically land at a vacant heliport (3), of which there are three in total.

A rotary wing aircraft can commence landing onto the flight deck before reaching the landing zone. This is achieved by clicking on the front aircraft (2) and then clicking on any of the three landing bays (3) on the flight deck.

If a rotary wing aircraft attempts to land and there is no vacant landing bay, a crash will ensue.
MISSION TYPES

AIR Anti-Aircraft mission
Used to search for and intercept enemy aircraft.

SUR Anti-Surface ship mission
Used to search for and intercept enemy surface ships.

SUB Anti-Submarine mission
Used to search for and intercept enemy submarines.

CAS Anti-Ground target mission
Used to strike at enemy ground targets.

EWA Electronic warfare mission (Non-player generated)
Whenever more than two aircraft are needed for any mission, an EWA mission is automatically initiated.

FLG Fleet logistics mission (Non-player generated)
Used to fly aircraft in and out of the carrier for either replacements or cargo carrying flights.

SPE Special Forces mission
Used to do reconnaissance on unidentified enemy ground threats.

AMP Amphibious mission
Used to land troops onto enemy territory.

RES Ship to ship/Rescue mission (Non-player generated)
Used to do inter ship transfers and perform rescue missions.
AIRCRAFT TYPES

FIXED WING AIRCRAFT

**F18 “Hornet”**
Short range search radar
Missions: AIR SUR CAS

**F18S “Super Hornet”**
Short range search radar
Missions: AIR SUR CAS EWA

**A6 “Intruder”**
Medium range search radar
Missions: AIR SUR EWA

**S3 “Viking”**
Medium range search radar
Missions: SUR SUB EWA
EC2 “Hawkeye”
  Long range search radar
  Missions: AIR SUR (Search only)

C3 “Greyhound”
  No Search radar
  Missions: FLG

ROTARY WING AIRCRAFT

SH60 “Seahawk”
  Short range search radar
  Missions: SUB EWA SPE RES

CH46 “Sea Knight”
  No search radar
  Missions: SPE AMP RES

V22 “Osprey”
  No search radar
  Missions: SPE AMP RES

AV8B “Harrier”
  Short range search radar
  Missions: AIR SUR CAS

CREDITS

EVERY SINGLE SOLDIER & RETRO EPIC

DESIGNER / PRODUCER: Johan Nagel
DEVELOPER: Niki Boshoff
DEVELOPER: Keith Boshof
DEVELOPER: Jem Smith
ARTIST: Hannes Ferreira
ARTIST: Neal Liddle
ARTIST: Daoyi Liu
ARTIST: Paul Lombard
AUDIO/TESTING: Theunis Lombard

SLITHERINE

CHAIRMAN: JD McNeil
DEVELOPMENT DIRECTOR: Iain McNeil
TECHNICAL DIRECTOR: Philip Veale
CREATIVE DIRECTOR: Richard Evans
MARKETING DIRECTOR: Marco A. Minoli
LEAD PRODUCER: Tamas Kiss
PRODUCERS: David Sharrock, Erik Rutins, Benedict Wilkins
PRODUCT MANAGER: Alberto Casulini
MEDIA RELATIONS: Kevin Buster
PRODUCTION DESIGN: Adriana Bienati
MANUAL LAYOUT: Myriam Bell
PRODUCTION LEAD: Matthew Davis
PRODUCTION TEAM: Lucas Young, Sam O’Neill
ADMINISTRATION: Dean Walker, Liz Stoltz
CUSTOMER SUPPORT STAFF: Paulo Costa, Joseph Miller
WEB DEVELOPMENT: Valery Vidershpan, Andrea Nicola, Fernando Turi