



for IBM® PC Compatibles

Home of the Underdogs  
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## SIMULATION ENHANCEMENTS & LAST MINUTE INFORMATION

### **The Pilot's Control Column Icon**

The Pilot's Control Column Icon is the lower of the two icons on the Pilot's Compartment Screen and not the top icon, as stated in the manual (Page 28). The top Control Column Icon will light up when you select the Co-Pilot. You will begin every mission in the Pilot's seat (left-hand looking out of cockpit window).

### **The Mission Briefing Map**

The Yellow Line shows the Waypoints to the initial point.

The Red Line shows the initial point to the Primary Target, and the Orange Line to the Secondary Targets.

The White Line shows the Waypoints to home base.

### **Viewing Crew Positions Keys F1-F10**

There is no need to assign the ten crew positions when you first enter the B-17 as stated in the *Flying Fortress* Manual. All crew are in their correct position and can be viewed immediately by pressing Function Keys **F1** to **F10**. If you choose to move any crew member out of position then the relevant key will show you the appropriate *Compartment Screen*.



## Skip Time Alt/T

By pressing **Alt** / **T** you will jump to the next Waypoint, or to a point where something is happening, (eg. an attack by enemy fighters.)

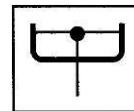
## Navigator's Views

If you access the Navigator's external view Key **E** (*Flying Fortress* Manual page 80) you may return to Map View by pressing Key **I**.

# FLIGHT SUPPLEMENT

By selecting "Crew Training" from the Main Bomber Screen you will access a menu allowing you to choose a variety of Training Options, including those which allow you to practise take-off and landing. You should study the text which appears carefully once you have made your selection. It gives details of the Training situation which follows.

To access all flight controls you must choose the Pilot **F3** or Co-Pilot **F4**. If you have just begun a mission you will automatically be in the Pilot's seat looking out of the cockpit window.



By pressing **Key** **[** (open square brackets) you can move the view left and by pressing **Key** **]** (close square brackets) you can move the view right. You may also access more selective views from within the cockpit by pressing the Pad keys **PgUp** **PgDn** **Ins** and **Delete**

To view the B-17 Pilot's Instrument Panel press **Key** **I**



The B-17 has numerous dials and switches which you should become familiar with. Study the Pilot's Instrument Panel Diagram.

Press Key **[L]** (open square brackets) to move your view left and Key **[J]** (close square brackets) to move your view right, while viewing the instrument panel.

You can easily raise your view away from the Instrument Panel by selecting Key **[W]**.

Press Key **[D]** to return to Instrument Panel View.

## THE PILOT'S INSTRUMENT PANEL

### **The Radio Compass**

This dial will show you your heading. A heading of 0° is North, 90° is East, 180° is South and 270° is West.

### **The Directional Gyro**

This dial will also show you your heading. A heading of 0° is North, 90° is East, 180° is South and 270° is West.

### **The Flight Indicator**

A gyro stabilized artificial horizon indicating degree of turn from 0° to 90°.

### **The Tachometers**

Two dials with two indicators on each dial to show the rpm of each engine. Do not run the engines at the maximum of 2500 rpm for long periods or they will overheat. Throttle back to 2300 rpm to cruise.

### **The Manifold Pressure Gauges**

Two dials with two indicators on each dial to show the manifold pressure on air intakes to engines.

### **The Fuel Pressure Gauges**

If fuel pressure falls due to damage, power will fail to the engine. Reducing revs may help.

### **The Oil Pressure Gauges**

If oil pressure drops, the engine will overheat and may seize up. Throttle back immediately!

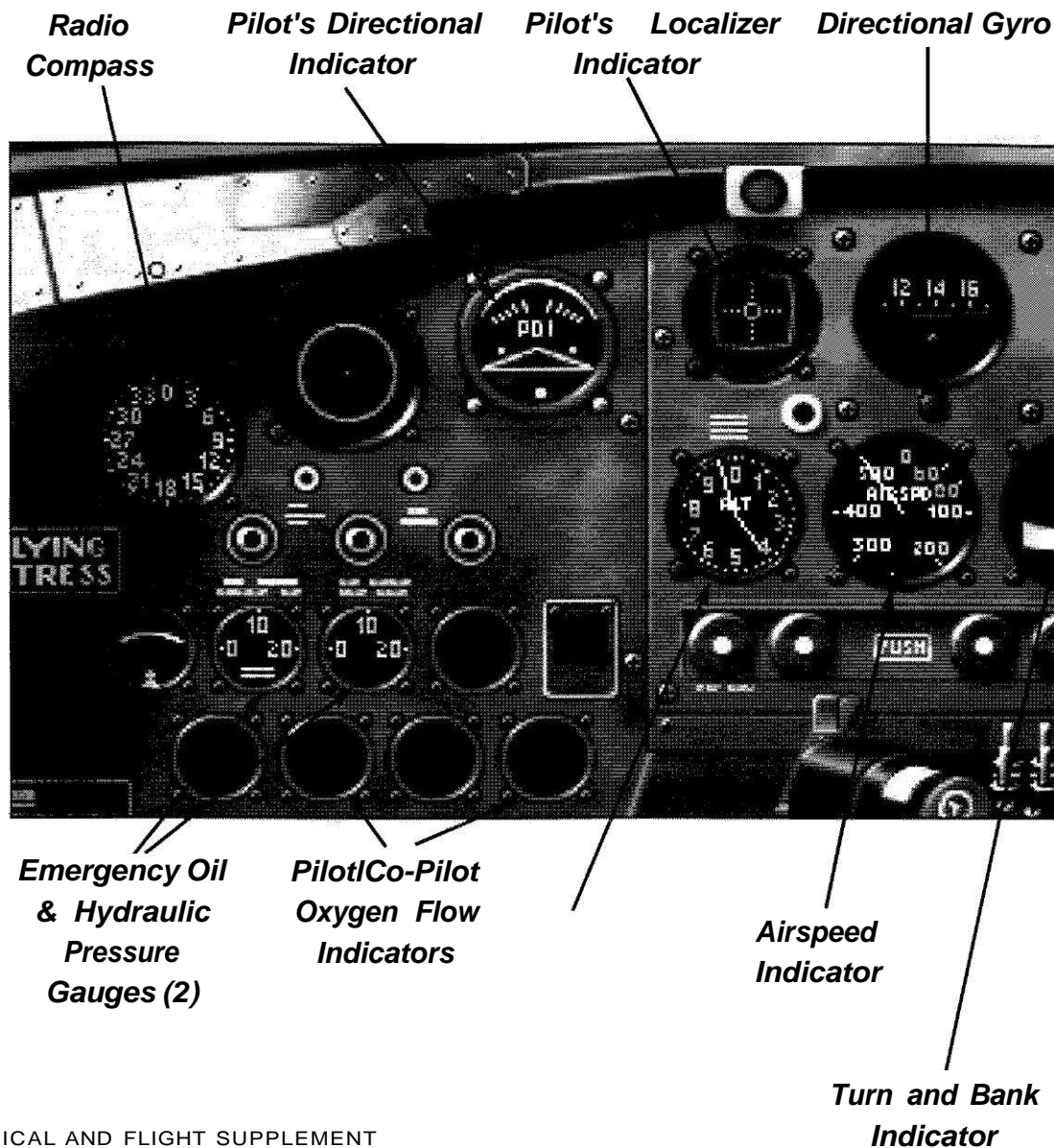
### **The Fuel Quantity Gauge**

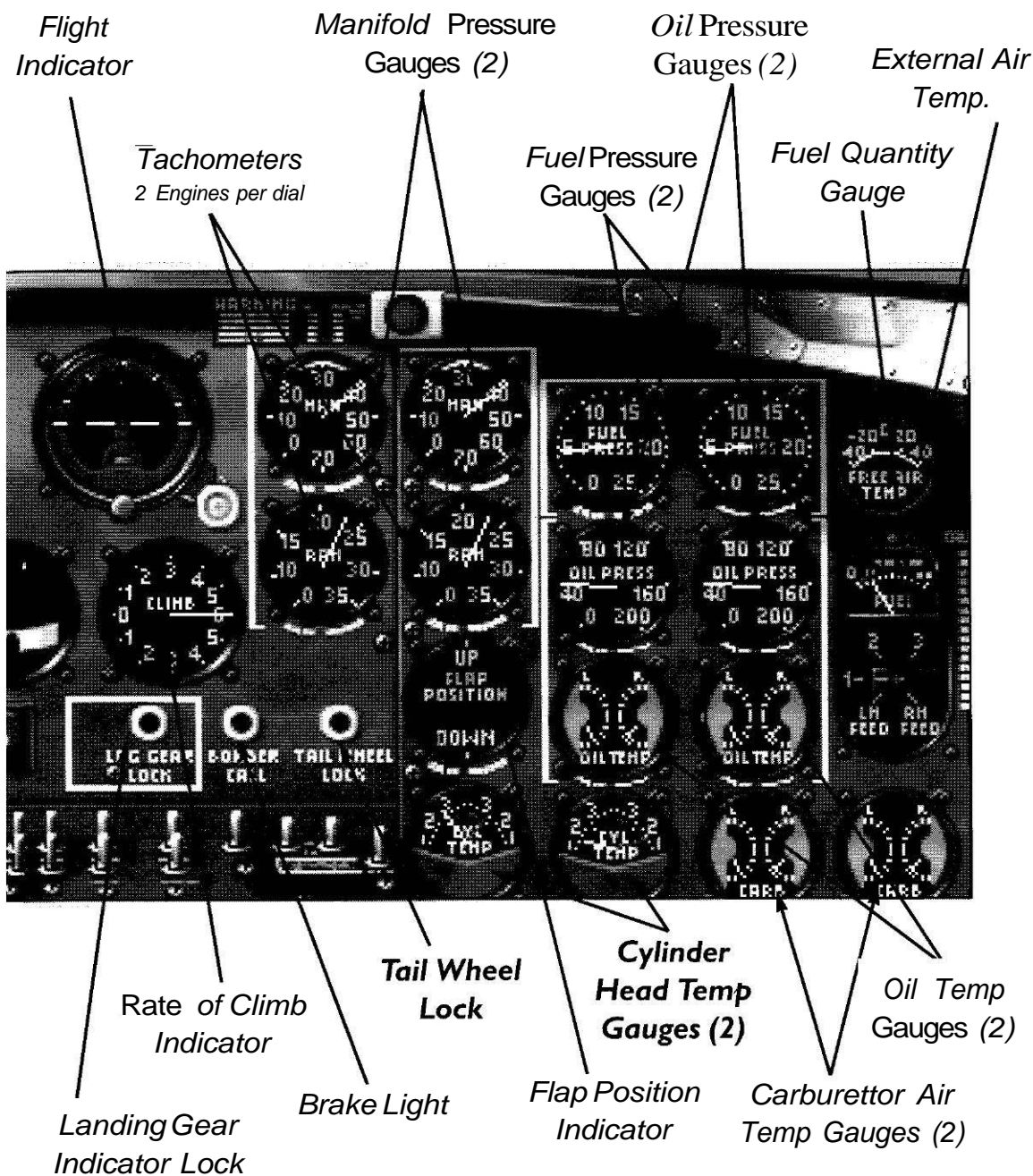
Your Flying Fortress carries enough fuel for all missions, unless the fuel tanks begin to leak as a result of damage. Reducing power to the engines will conserve fuel.



## THE PILOT'S INSTRUMENT PANEL

Study the diagram of the Pilot's Instrument Panel. It's important that you are familiar with the location of all dials.







### **The Oxygen Flow Indicators**

If the values fall on the flow indicators, you must drop to below 10,000 feet, where there is sufficient oxygen for the crew to survive without oxygen masks.

### **The Altimeter**

This dial shows height above sea level. The long dial shows hundreds of feet and the shorter dial thousands of feet. The inset window shows tens of thousands of feet in figures. Always be aware of your flying height!

### **The Airspeed Indicator**

This dial shows the speed of the aircraft through the air in Miles Per Hour from 0 to 500.

### **The Turn and Bank Indicator**

The banking rate of the plane is indicated by the central dot moving away to the right or left.

### **The Landing Gear Indicator Lock**

A visual indicator that the main Landing Gear has been raised or lowered. In event of damage you may have to operate the gear manually.

### **The Rate of Climb Indicator**

A visual indication of climb/dive angle shown as hundreds of feet per minute. Pointer on 0 means level flight.

### **The Brake Light**

Illuminated when the wheel brake is engaged.

### **The Tail Wheel Lock**

A visual indicator that the Tail Landing Gear has been raised or lowered.

### **The Flap Position Indicator**

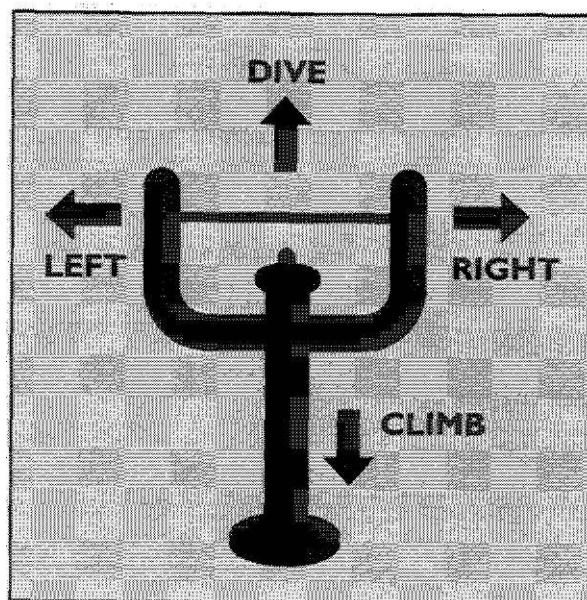
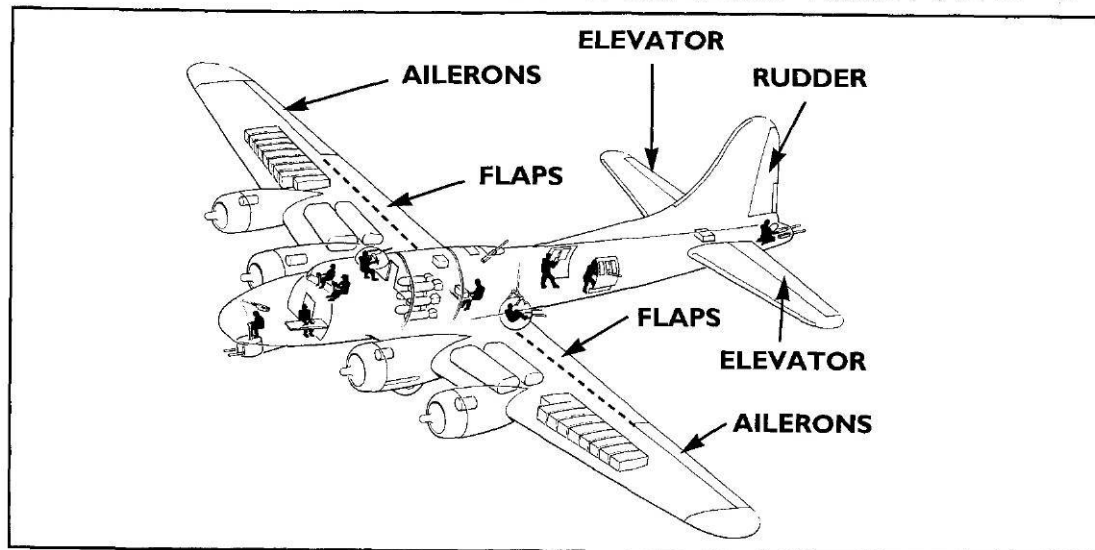
Flaps are the trailing edge of the wings that when lowered, enable the aircraft to get extra lift at take off and slow down for landing.

### **The Cylinder Head and Oil Temperature Gauges**

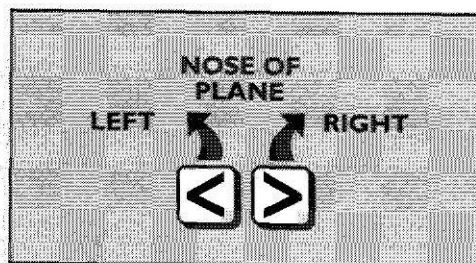
They will run a little hot if the engine is run at maximum RPMs or losing oil for any period of time. If they do, throttle back.



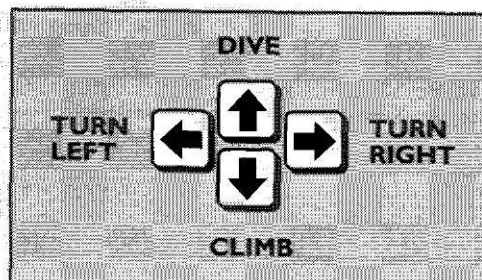
# FLIGHT CHARACTERISTICS



JOYSTICK CONTROL COLUMN



RUDDER KEYS



CURSOR KEYS CONTROL COLUMN



## THE PILOT'S CONTROL COLUMN

A Joystick **Controller** is recommended for flying the B-17 but you may also fly it using a Keyboard **Controller**.

*Ailerons* are lateral control flaps at the rear of the airplane main wing tips. When raised or lowered, by moving the Control Column left/right, they will make the plane turn to the left or right.

*Elevators* are the horizontal portions of the tail. When pushed up/down by pushing the Control Column up/down, they will make the plane dive or climb.

**Rudder left/right** [←] [→]

*Rudder* controls left/right will swing the nose of the plane left/right by moving the trailing edge vertical segment of the tail left/right.

## THE FOUR ENGINES

The *Flying Fortress* is a large four-engined bomber and this simulation provides separate controls for each of the four engines. Engine number 1 is the left outboard engine from the Pilot's View followed by 2,3,4 in sequence.

*All numeric keys are on the top row of the main computer keyboard.*

[1] [2] [3] [4]	Increase power on individual engines 1-4
[Shift] / [1] [2] [3] [4]	Maximum power on engines 1-4
[5] [6] [7] [8]	Decrease power on individual engines 1-4
[Shift] / [5] [6] [7] [8]	Minimum power on engines 1-4
[+]	Increase power on all engines
[Shift] / [+]	Maximum power on all engines
[-]	Decrease power on all engines
[Shift] / [-]	Minimum power on all engines
[Ctrl] / [1] [2] [3] [4]	Start/Stop (feather) engines 1-4
[Alt] / [1] [2] [3] [4]	Extinguish Fire on engines 1-4



**[Shift]** / **[1]** **[2]** **[3]** **[4]**

Maximum power on engines 1-4

**[5]** **[6]** **[7]** **[8]**

Decrease power on individual engines 1-4

**[Shift]** / **[5]** **[6]** **[7]** **[8]**

Minimum power on engines 1-4

**[+]**

Increase power on all engines

**[Shift]** / **[+]**

Maximum power on all engines

**[-]**

Decrease power on all engines

**[Shift]** / **[-]**

Minimum power on all engines

**[Ctrl]** / **[1]** **[2]** **[3]** **[4]**

Start/Stop (feather) engines 1-4

**[Alt]** / **[1]** **[2]** **[3]** **[4]**

Fire extinguisher on engines 1-4

**[G]**

**[F]**

**[B]**

**[D]**

## THE BOMBARDIER

**[C]** Compartment/Crew Position View

**[I]** The Bombsight View

**[W]** Window View

**[E]** External View

**[M]** Manual/computer control toggle

**[D]** Bomb Bay Doors (open/closed)

**[O]** Bombsight On/Off

**Controller** **[↑]** **[↓]** **[←]** **[→]** / **Joystick** Adjust bombsight tracking motor speeds left/right and up/down. Plus **[Shift]** -Fine Control

**[Spacebar]** / **[Return]** or **Selector** Release Bombs

## BOMB BAY

**Views** (only accessible if crew man taken to compartment)

**[C]** A crew man's view of the bombs

**[E]** External view

**[W]** Return to bomb bay view

## THE NAVIGATOR

**[C]** Compartment / Crew Position View

**[E]** External View

**[I]** Map View

**[B]** Mission Briefing Details

**Mouse**, **[↑]** **[↓]** **[←]** **[→]** **Controller** -point and click to set estimated position.

## THE RADIO OPERATOR AND INTERCOM SYSTEMS

**[C]** Compartment / Crew Position View

**Mouse**, **[↑]** **[↓]** **[←]** **[→]** **Controller** -point and click on various Icons/Messages.

## THE CREW

Viewing the Ten Crew Positions.

**[F1]** Bombardier

**[F2]** Navigator

**[F3]** Pilot

**[F4]** Co-Pilot

**[F5]** Engineer/Top Turret Gunner

**[F6]** Radio Operator

**[F7]** Ball Turret Gunner

**[F8]** Left Waist Gunner

**[F9]** Right Waist Gunner

**[F10]** Tail Gunner

## THE GUNNERS: DEFENDING THE B-17

**Controller** **[↑]** **[↓]** **[←]** **[→]** / **Joystick** Move turret/gun

**[Shift]** Fine tracking on target

**Joystick Button** / **[Spacebar]** / **[Return]** Fire

**[U]** Unjam gun (manual control)

# THE CONTROLLER

The simulation can be controlled using a Joystick, or the Keyboard and, to a limited extent, a Mouse.

## THE SELECTOR

The Joystick Fire Button, the Mouse Button or Cursor Keys

↑ ↓ ← → for movement and Home End for left/right buttons.

## AIRCRAFT SELECTION

- X Next Aircraft
- Z Previous Aircraft

## GENERAL AIRCRAFT VIEWS

3D views from current aircraft:

- Shift / F1 Forward View
- Shift / F2 Rear View
- Shift / F3 Left View
- Shift / F4 Right View
- Shift / F5 Up View
- Shift / F6 Down View

External views that depend on context. (From the aircraft, its targets, bombs, airbase control tower etc.):

- Shift / F7 Tactical View
- Shift / F8 Reverse Tactical View

External view from notional chase plane:

- Shift / F8 Chase View

External views from remote camera:

- Shift / F10 External View

Moving the remote camera:

- PgUp Pitch Up PgDn Pitch Down
- Ins Rotate Left
- Del Rotate Right

Pad Key 5 Centers / Resets 3D Views

- + Zoom In
- Zoom Out

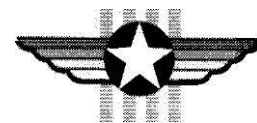
## GENERAL CONTROLS

- A Aircraft Status/Damage View
- C Compartment View/Action View Toggle
- I Instrument Panel View (Bombardier, Navigator and Pilot/Co-Pilot only)
- W Window View (3D view through aircraft window)
- E External View (3D view from remote camera)
- M Toggle Manual/Computer Control
- Alt / C Configuration Screen
- Alt / A Accelerate Time
- Alt / T Skip Time
- Alt / D Adjust Detail Level (cycle through)
- Alt / M Film Director Mode Toggle
- Alt / P Pause Game/Resume Game
- Ctrl / Q Quit to DOS
- Alt / S Sound Levels
- Alt / B Hide Game

## PILOT/CO-PILOT

Joystick, ↑ ↓ ← → Control Column  
(elevator, ailerons)

- < > Rudder left/right
- I View to the left (Cockpit View/Pilot's Instrument Panel)
- J View to the right (Cockpit View/Pilot's Instrument Panel)
- 1 2 3 4 Increase power on individual engines 1-4



## OTHER PILOT CONTROLS

- ☐ G Landing Gear Up/Down (starts motors)
- ☐ F Flaps Up/Down Toggle
- ☐ B Brakes On/Off
- ☐ D Bomb Bay Doors Open/Closed  
(starts motors)

*Please note that any control that starts a motor will take time to function.*

You will begin every mission in the pilot's seat under player control. Your Flying Fortress will be at its starting point on the airfield. Ahead of you, the two other B-17s in your 'V' will be preparing to take-off.

You must take-off, join the other two planes, and then assemble in a flight of 6 or 9 Fortresses (depending on the formation to be flown).

On your first mission, you may find it easier to watch while the computer takes control. To activate computer control, press the "M" key. Repress the "M" key to regain control. If you set the plane under computer control, you can jump around any of the views or screens to watch the take-off.

The following pages describe how to take-off manually.

### Starting Engines

Start all four engines in the sequence ☐Ctrl / ☐1 ☐2 ☐3 ☐4

Increase the Engine Throttle Controls ☐1 ☐2 ☐3 ☐4

Release the Brake ☐B

The B-17 will now begin to move.

Check that you can easily flip from Pilot's Instrument Panel ☐I to Window View ☐W to see flight information.



## Taxiing and Steering

Steer the B-17 by using your *Controller*. Gentle left/right will produce a slow turn in the chosen direction.

Stay on the correct path. Do not stray onto the grass.

Steer the bomber carefully to the edge of the take off runway. Try to line up the B-17 along the white dotted line.

**Flaps** Check that Flaps are Down **[F]**

## Taking Off

Apply maximum power to all four engines **[Shift]** / **[+]**. Do not try to pull the plane into the air. Normally, when you reach an Airspeed of 110-115 mph a gentle 'pulling back' on the *Controller* will allow the plane to lift itself off the ground. The B-17 controls may feel sluggish compared to other flight simulators, but remember that this is a big, heavy airplane.

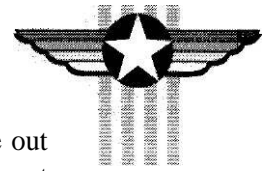
After the airplane has left the ground, and you are sure that you have sufficient flying speed, raise the Landing Gear **[G]**. Check that this has happened with any appropriate Outside View, then change flaps Up **[F]**

After reaching an airspeed of 130-150 mph, adopt a normal climb attitude with the Rate of Climb Indicator pointer at 200 feet per minute and watch the Altimeter rise gently.

Make your climb at 130-150 mph. Steady smooth flying is important. This will cut fuel consumption, increase rate of climb and reduce engine wear. Always check your instruments. They are there to tell you how your plane is performing.

You will find the first two planes with which you must join up circling the airfield at about 1000 feet.

Form a group of 3 in a V formation. You must then follow the group to join up with the other groups at about 2000 feet before flying off towards the target. Once cruising, throttle back to keep pace.



**If you experience difficulty in finding the other planes, switch to computer control.**

Once you have joined the other planes of your squadron in formation, the flight will strike out towards the first Waypoint. You are not the leader of the formation so if you choose to drop out of formation, for whatever reason, the others will not follow you.

## LANDINGS

When you are near the English base, you will receive a signal over the intercom system giving you a heading to land on. The other planes in the formation, and yours if under computer control, will begin to move into their final traffic pattern (a flight path in which they circle the airfield in a rectangular pattern at approximately 1000 feet).

If you do not wish to land the plane manually, switch to computer control by pressing **[M]** and sit back and watch.

Your B-17 will be the first to land. The other planes will continue to circle until you have done so.

You should leave the rectangular formation to make your final approach. Lower your Flaps **[F]** and drop your Landing Gear **[G]**. Keep engine rpm's to 2000 at about 130 mph.

### Final Approach

The approach is basically a controlled glide, with flaps down, and in which power is used to maintain an accurate landing position.

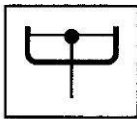
Reduce power gradually **[ - ]** until the desired airspeed (about 100-120 mph) and rate of descent have been established. Touch down gently trying to land all wheels on the runway at the same time. Drop to minimum throttle.

### Landing Roll

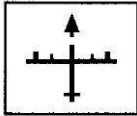
When you have landed make sure you use the entire runway for the landing roll. Do not apply the brakes too early. Apply the brakes **[B]** when you see the plane slowing down from its roll. The B-17 should then slow down and stop.



## ICON SUMMARY



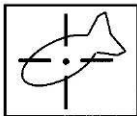
Pilot's/Co-Pilot's  
Control Column Icon



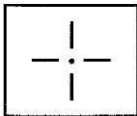
Navigation Icon



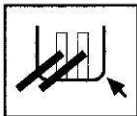
Radio Operator Icon



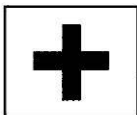
Bombardier Icon



Gun position Icon



Turret Repair Icon



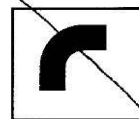
First Aid Icon



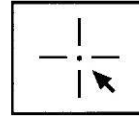
All Crew Bail Out Icon



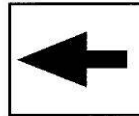
Crew File Icon



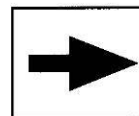
Fight Fire Icon



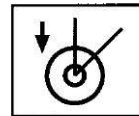
Unjam Guns Icon



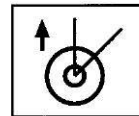
Move Crewman Left Icon



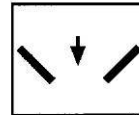
Move Crewman Right Icon



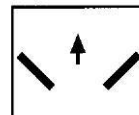
Manually Lower Gear Icon



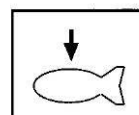
Manually Raise Gear Icon



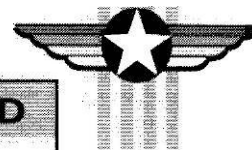
Manually Open Bomb  
Bay Icon



Manually Close Bomb  
Bay Icon



Manually release bombs Icon



<b>Bombardier</b>			
<b>Release Bombs</b>	<i>Left Hand Button</i>	<i>Fire Button</i>	<i>Space Bar/ Return/Enter</i>
<b>Bombsight Tracking</b>	•	<i>Left/Right/Up/Down</i>	<i>Cursor Keys</i>
<b>Pilot/Co-Pilot</b>			
<b>Control Column Simulation</b>	•	<i>Left/Right/Up/Down</i>	<i>Cursor Keys</i>
<b>Gunners</b>			
<b>Move Turret/Gun</b>	•	<i>Left/Right/Up/Down</i>	<i>Cursor Keys</i>
<b>Fire Guns</b>	•	<i>Fire Button</i>	<i>Space Bar/ Return/Enter</i>
<b>Navigator</b>			
<b>Move Navigation Marker</b>	<i>Move Mouse Pointer</i>	<i>Left/Right/Up/Down</i>	<i>Cursor Keys</i>
<b>Fix Estimated Position</b>	<i>Left-Hand Button</i>	<i>Fire Button</i>	<i>Pad Home Key</i>
<b>Radio Operator</b>			
<b>Choose Icon/ Message</b>	<i>Move Mouse Pointer</i>	<i>Left/Right/Up/Down</i>	<i>Cursor Keys</i>
<b>Select Icon/ Transmit Message</b>	<i>Left-Hand Button</i>	<i>Move Pointer</i>	<i>Pad Home Key</i>

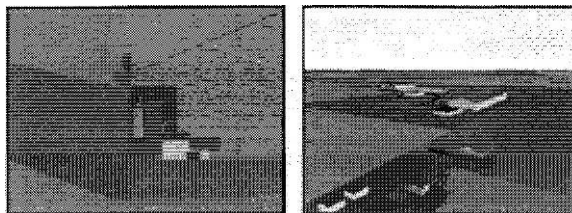
# TARGET APPENDIX

Locations specified are the locations where the shots were taken, other targets of the same type are very similar.

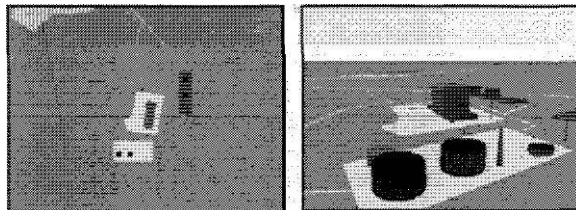
## VI/V2 ROCKET SITE - FRANCE



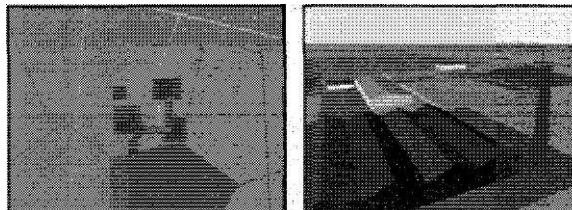
## DRY DOCKS - NANTES



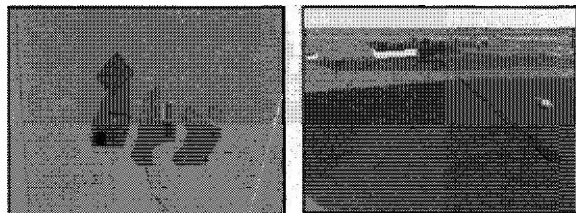
## OIL REFINERY - ASCHAFFENBURG



## FACTORY COMPLEX - BERLIN



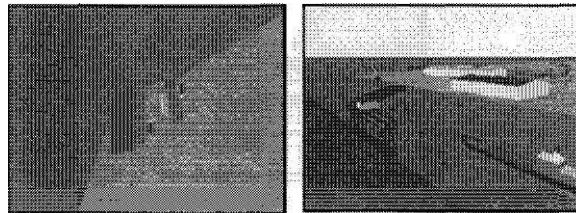
## ARMY DEPOT - AACHEN



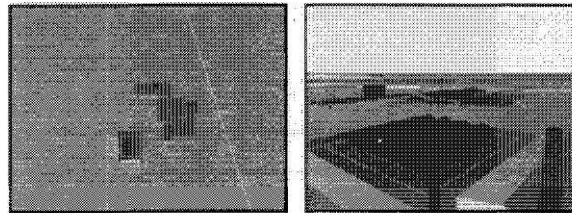
## FACTORY COMPLEX - AUGSBERG



## DRY DOCKS - CUXHAVEN



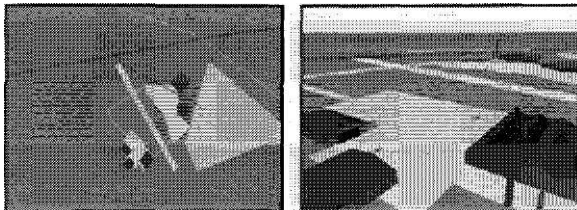
## FACTORY COMPLEX - EINDHOVEN



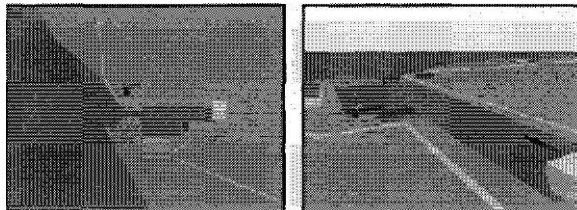


# TARGET APPENDIX

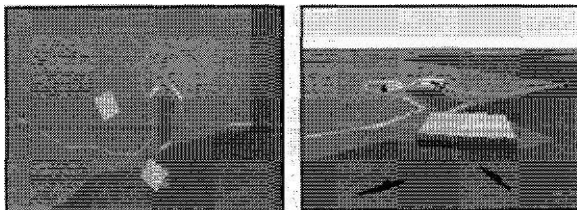
**FACTORY COMPLEX - BREMEN**



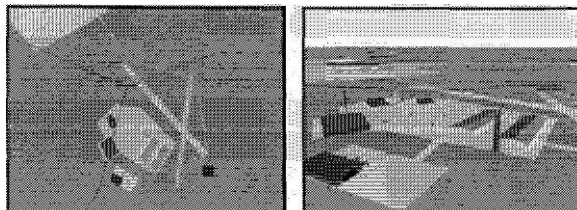
**U-BOAT - BASE - LA PALLICE**



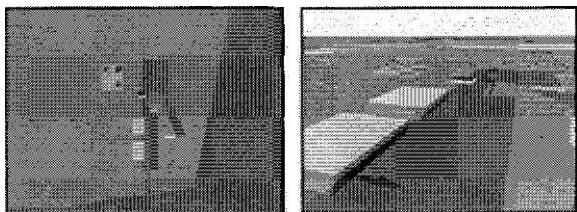
**U-BOAT BASE - LORIENT**



**AIRCRAFT FACTORY - BRUNSWICK**



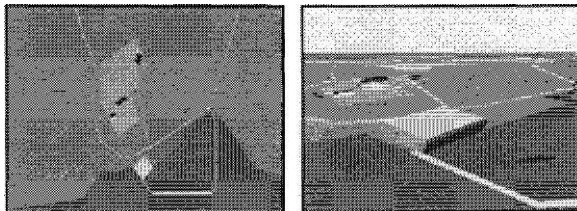
**U-BOAT BASE - ST. NAZAIRE**



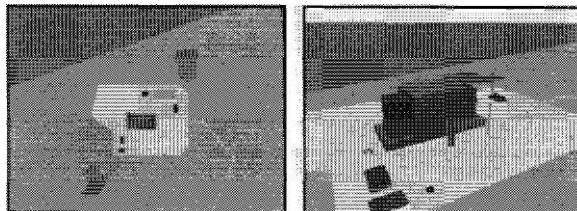
**TANK FACTORY - OSNABRUCK**



**U-BOAT BASE - BREST**

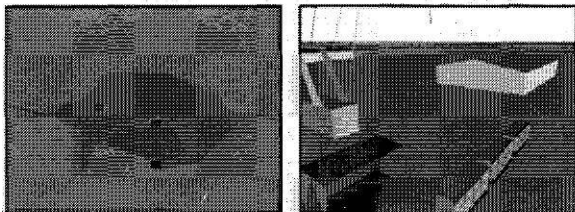


**POWER STATION - ZEEBRUGGE**

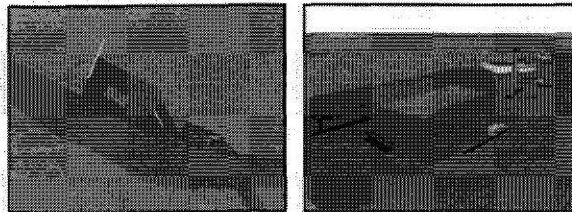


# TARGET APPENDIX

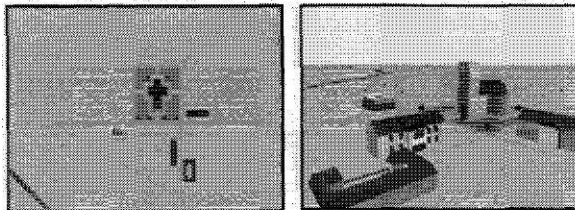
## RAILYARD - ABBEYVILLE



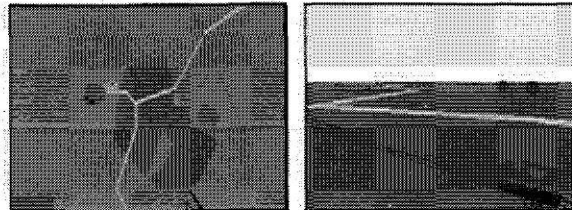
## SHIPYARD - BREMEN



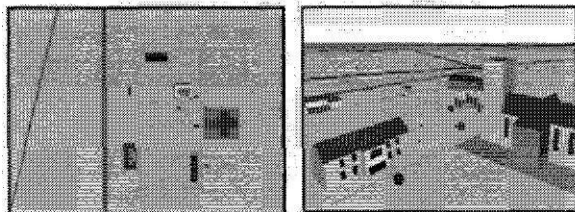
## S.S. HEADQUARTERS - BERLIN



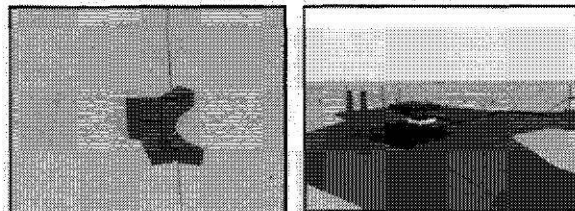
## VI ROCKET SITE - CHERBOURG



## S.S. HEADQUARTERS - LEIPZIG



## STEELWORKS - BOCHUM





# IBM<sup>®</sup> PC COMPATIBLE KEY GUIDE

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**MICRO PROSE**<sup>™</sup>  
SIMULATION • SOFTWARE

## CREW POSITION KEY:

- Navigator      ♦ Gunners
- Bombardier    ★ Radio Operator
- ▼ Pilot/Co-Pilot

Keys marked with the above symbols will only work if player is in relevant crew position.

**SHIFT F1 - F6**  
3D Views from Current Aircraft

Shift F1  
Forward View

Shift F2  
Rear View

Shift F3  
Left View

Shift F4  
Right View

Shift F5  
Up View

Shift F6  
Down View

Shift F7  
Tactical View

Shift F8  
Rev. Tact. View

Shift F9  
Chase View

Shift F10  
External View

**Pilot / Co-Pilot**  

5,6,7,8  
Decrease Power Engines 1-4

SHIFT 5,6,7,8  
Minimum Power Engines 1-4

**F1 - F10**  
View Crew Positions if Assigned, Otherwise View Compartments

**Pilot/Co-Pilot ▼**  

1,2,3,4  
Increase Power to Individual Engines 1-4

SHIFT 1,2,3,4  
Max. Power Engines 1-4

CTRL 1,2,3,4  
Starts / Stops Engines 1-4

ALT 1,2,3,4  
Fire Ext. on Engines 1-4

**CTRL Q**  
Quit to DOS

ALT / C  
See Configuration Screen

ALT / A  
(Hold Down) Accelerate Time

ALT / T  
Skip Time

ALT / D  
Detail Level (Cycle thru')

ALT / M  
Director Mode

ALT / S  
Sound Levels

T / B  
Hide Name

**SHIFT - / +**  
Minimum/Maximum Power on All Engines

**■ Navigator**  
Move Navigation Marker Over Map  
[Home] Key: Set Estimated Position

**● Bombardier**  
Bombsight Motor Tracking Speeds  
Plus [Shift] - Fine Control

**▼ Pilot/Co-Pilot**  
Control Column Simulation Elevators / Ailerons

**♦ Gunners**  
Move Turret / Gun ([Shift] - Fine Tracking)

**★ Radio Operator**  
Choose Icon / Message      ([Home] Key: Select Message)

# THE BOMBARDIER

## ACTION VIEWS

By selecting the Bombardier photo (first left, top left), the Bombing Icon and pressing Key C from the *Compartment Screen* you will enter the Bombardier's position. Here you will be able to choose from 3 Bombardier action views:



### The Bombsight View (Key I)

Looking through the Norden Bombsight at the ground detail below with 4 indicator lights for Bomb Sight Active, Bomb Doors Open, Bomb Release Cue, Bombs Gone. This is the view you should go to when approaching the target.

### Window View (Key W)

This option allows a view out of the Plexiglas nose section from the Bombardier's position.

### External View (Key E)

This option allows an external view of the B-17. (Press Key W to return to Window View).

### Returning to Compartment Screens (Key C)

You can always return to the *Compartment Screen* by pressing Key C.

## BOMBARDIER'S CONTROLS

Press Key M to assume manual control.

### Bomb Bay Doors (Key D)

Starts the motors to open/close the bomb bay doors.

In the event of damage, the doors can be opened *manually* by returning to Compartment View (Key C) and choosing a crew member to go to the Bomb Bay Compartment. Three Icons will appear that enable that crew member to

open doors



close doors



and manually trigger the dropping of the bomb



When you are in the Bomb Bay you may view Bomb Bay operation by pressing Key C.

## Bombsight Controls

Bombsight On/Off Key O.

Key O will turn the bombsight On/Off and allow control of the plane via the bombsight. But you must have already assumed manual control of the Bombardier Key M.

Your *Controller* (Joystick, Cursor Keys) will adjust the bombsight tracking motor speeds left/right and up/down.

To release the Bombs press [Space/Return/or Selector]

## IDENTIFYING THE TARGET

When the bombing force is an appropriate number of miles from the target there will be a warning issued from Bomb Group Leader. If you are intending to be the Bombardier (and the rewards will be greater if you are), give yourself plenty of time to get into position and familiarize yourself with the bombing controls. Press Key M for manual control.

The primary aim of the mission is to drop the bombs on the correct target accurately and promptly. Be sure that you have identified the target correctly and take care to line up the B-17 in the correct bomb run. The Bombardier will need at least 20 seconds of level flight to track the target. The bombsight cross hairs must stay on the target until the Bomb Release Cue lights up. You must try to forget about the flak and enemy fighters during this time.

### Primary

This is your main objective and will earn you better rewards and promotions if you achieve it. Study details of the target and be aware of what to look for.

### Secondary

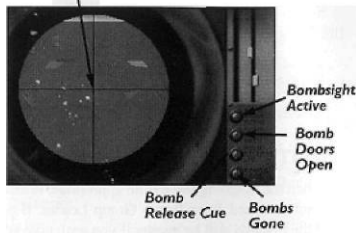
If the *Primary* is impossible you must switch to the *Secondary Target*. This will often be a lower priority target and will be not very far from the *Primary Target*. Issue the *Abort Primary Target* Message on the radio and set the new heading.

Random ill-directed bombing will be penalized. However, if bombs are jettisoned to preserve the safety of the crew and the bomber there will be no penalty imposed by Bomber Group.

## BOMBING PROCEDURE *THE NORDEN BOMBSIGHT*

### The Ideal Line *Keep target in Cross-Hairs*

Make sure the target is lined up perfectly with the cross-hairs on the bombsight. Try to aim for the centre of a block or rectangular building. You will have to keep the target in the cross hairs for a minimum of 20 seconds by using your *Controller*. When the Bomb Release Cue lights up, release the bombs by pressing the *Selector*.



### Overshooting the target

There may be occasions when the cue light will not come on, even though you have kept the cross hairs in the correct position. This may be because the bomber is too close to the target and dropping the bombs will mean they will overshoot it. You will have to go around again.

### Random Targets

Make sure you are tracking the *correct target*, the cue light will come on even if you track any normal buildings; it does not know what your correct target looks like. It is only there to tell you that the bombs will hit *the target you are tracking* if you release at that particular point.

### Go Around Again

If you fail to hold the bomber on target you may find that you can transmit a radio message to the test of the formation to go around again. If no message is available you will have to transmit Abort and go to the *Secondary Target*.

## THE BOMBING FORMATION

The rest of the squadron will bomb with you as long as you remain in the formation. If you choose to leave formation or have to drop out because of mechanical difficulty the others will not stay with you. You may be able to repair damage and try to find the formation again.

## DAMAGE

If the bomb bay doors or bomb sight are completely out of action and the bomber goes to the target, the Commander will be credited with a 'Near Miss'. Carrying on with the mission, under adversity is recommended for Rewards and Promotions.

## BOMB BAY VIEWS

If you wish to see the bomb bay opening/closing and the bombs dropping from inside the compartment, then you must take a crew member to the bomb bay using the

Move Crewman Icons.



will give you a down view of the bombs, Key E will give you an external view and Key W will return you to bomb bay view.

## Tactical Views of Bombs (Shift F7/Shift F8)

If you wish to follow the bombs dropping on to the target you can do so by using Tactical View and Reverse Tactical View, You may have to Zoom In/Out (Pad Plus +/Pad Minus -) and pitch/rotate to get the best view of the bombs hitting (or missing) the target.

## ON/OFF TARGET

A mission is deemed successful by the amount of damage done to target. If a Commander does not drop the bombs on the correct place the mission will be classed a failure. Also, you must be the one to drop the bombs: if a computer-controlled crewman drops them, the player will only receive minimal credit.