TECHNICAL SUPPLEMENT

CONTENTS

Your B-17 Flying Fortress game should contain a manual, this Technical and Flight Supplement (including a pull-out Key Guide), a poster, a set of 3.5" disks and a registration card.

REQUIRED EQUIPMENT

Computer: This simulation requires a Commodore Amiga with at least 1 Mb of RAM.

Controls: The simulation can be run entirely from the keyboard and mouse. Most sections also support joystick control. Analogue joysticks are not supported.

Display: This simulation requires a colour display.

Disk Drives: B-17 Flying Fortress can be installed onto 3.5" floppy disks. However, it works best if installed onto a hard disk drive.

Important: B-17 Flying Fortress should not be played from the disks enclosed. You must either copy the original disks onto backup floppy disks (see Making Backup Game Disks), or use the Install program to create a subdirectory on your hard disk. If you attempt to play from the disks enclosed they may become permanently altered.
**Amiga Keyboards**

The simulation has alternative keys for players who own Amigas without numeric keypads. The following alternative keys should be used:

<table>
<thead>
<tr>
<th>Numeric Key Pad</th>
<th>Alternative</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Key Pg Up [9]</td>
<td>CTRL/Cursor Key Up ↑</td>
<td>Pitch View Up</td>
</tr>
<tr>
<td>Key Pg Down [3]</td>
<td>CTRL/Cursor Key Down ↓</td>
<td>Pitch View Down</td>
</tr>
<tr>
<td>INS Key [0]</td>
<td>CTRL/Cursor Key Left ⬅</td>
<td>Rotate View Left</td>
</tr>
<tr>
<td>DEL Key [4]</td>
<td>CTRL/Cursor Key Right ⬆</td>
<td>Rotate View Right</td>
</tr>
<tr>
<td>KeyPad [5]</td>
<td>Backspace</td>
<td>Centre 3D View</td>
</tr>
<tr>
<td>KeyPad Plus [+]</td>
<td>Close Square Brackets ]</td>
<td>Zoom View In</td>
</tr>
<tr>
<td>KeyPad Minus [−]</td>
<td>Open Square Brackets [ ]</td>
<td>Zoom View Out</td>
</tr>
</tbody>
</table>

**COPY PROTECTION**

_Flying Fortress_ has no disk copy protection. This means that you can install the simulation files from the original disks to a hard disk. However, the program asks you a simulation related question. Use the manual to answer the question. MicroProse regrets that continuing casual and organized software piracy requires that we retain this minimal form of copy protection.

**INSTALLATION**

**INSTALLATION CONCEPTS**

_B-17 Flying Fortress_ is not copy-protected. This means you can copy the game files from the original disks to other floppy disks, or to a hard disk. However, always keep the original disks handy.

_B-17 Flying Fortress_ has been left unprotected for your convenience in making back-up copies and when playing from a hard drive. However, making additional copies to give away or sell is a Copyright Violation. See the Copyright Notice in the game manual.

**Making Backup Game Disks**

To create the backup game disks for _B-17 Flying Fortress_ load up the Workbench disk and insert the first disk you wish to copy. A disk icon and the name of the disk will appear. Click
once on the disk icon and the name of the disk will appear. Hold down the right mouse button and you will see three menus. Choose the Workbench menu and select the Duplicate option. Follow all on-screen prompts and the disk will be duplicated onto your blank disk.

When a disk has finished copying you will need to rename it so that it has the same name as the original disk from which it was copied. To do this insert your copied disk, click on its icon once with the left button and then hold down the right button. Select the Rename icon from the Workbench menu. Finally, delete the “Copy Of” prefix in front of the disk name and press the [Return] key.

Repeat the above procedure for each of the original B-17 Flying Fortress game disks.

**Installing on Hard Disk**

Boot up your hard disk as normal and insert B-17 Flying Fortress Disk A. Open this disk and double-click on the “INSTALL_HD_B17” icon. Please follow any on-screen prompts. A drawer will be created on your hard disk, containing all necessary files.

**Running B-17 Flying Fortress**

**From the Floppy Disks**

If your computer has KickStart in ROM, turn off your computer and insert your backup Disk A. Power up the computer, and the program will auto-load.

If your computer does not have KickStart in ROM, load KickStart as normal, insert your backup Disk A at the Workbench prompt and the program will auto-load.

Follow any on-screen prompts requesting disk changes.

**From the Hard Disk**

Boot up your hard disk as normal. Open the drawer and double-click on the “game” icon.

**Saved Games**

Individual Bomber Campaigns may be saved to disk but only when missions have finished. Campaigns may be saved onto your hard drive or onto a previously formatted floppy disk. It is recommended that you do not save campaigns onto your game disks or backup game disks. Saved game files are normal Amiga DOS files that can be moved and copied using standard Amiga DOS commands.

**Loading A Saved Game**

To load a saved game, choose the “Load Save” button on the Roster Screen, then follow the on-screen prompts.
SIMULATION ENHANCEMENTS & LAST MINUTE INFORMATION

The Compartment Screens

The original PC version of Flying Fortress contained six Compartment Screens each showing the position of the crew for that part of the plane. You will find many references in the manual to the different Compartment Screens (particularly pages 50-51). For ease of use and to speed up the gameplay, the Amiga version has all six Compartment Screen details on ONE top down view. This is still accessed by Key C and the icons and portraits still appear. However, you will NOT be able to click-on a 2-D picture of the individual crew member but will have to select the portraits.

This screen will also show damage.

Quick Start

A Quick Start Option is available in the Difficulty Menu of the Configuration Screen. Select this option to bypass the taxi-out sequence and eliminate navigation errors (see Navigation below).

You will begin the game as the last of a flight of three B-17s, queued, ready for take-off, near the start of the runway. You will be in manual control of the pilot, with your engines running and throttles set in the idle position. Increase power to the engines to begin taxiing forwards, then follow the other B-17s in your flight out onto the runway for take-off.

Manual/Computer Control

The simulation will show a Hand Icon in a corner of the screen when you are in Manual control of any B-17 position. If you choose to revert to Computer control (Key M), a Computer Icon will appear in the same position.
Navigation

Your Navigator will always make minor errors in estimating your position depending on his particular skill level. Your B-17 flight (3 planes) will drift off course unless you manage to correct his estimates. The more you correct him successfully, the better will become his skill level.

Bombing

If you do not wish to aim and drop the bombs manually, or if there are no uninjured crew members qualified to operate the Norden Bombsight you can, provided you are in formation, position a crew member at the bombardier’s station and have the computer controlled crew member release the bombs when he sees the raid leader’s signal.

If you do wish to bomb manually, you should position a qualified crew member at the bombardier’s station and, using the Radio Operator, send the ‘Bomb on my command’ Radio message to take control of the bomb run so that the computer controlled crew will wait for your commands.

Gunnery

The Turrets Menu on the Configuration Screen allows you to set the speed at which the turrets and hand held guns will traverse in response to the keyboard and joystick controls. In addition, fine tracking may now be enabled by holding down either the Shift or CTRL Keys while operating the other controls. The CTRL Key is recommended as it may give better results with some keyboards.

Landing

The landing procedure differs depending on whether you are in formation or not when you reach Alconbury (Home Base).

In Formation

The formation will circle Alconbury descending to an altitude of about 2,000ft. At this point, the Alconbury control tower will radio ‘Permission to Land’. When this happens, the computer controlled pilot will break away from the formation to begin his landing approach and will land the aircraft unless you take manual control (by selecting the Pilot and Key M). If you wish to land immediately, before landing permission is
granted, you must send a radio message requesting permission to land, then wait for the reply from the Tower to start the landing sequence.

Out of Formation

The Control Tower will ask whether you want permission to land. You should reply with a radio message requesting permission, then proceed as above.

Breaking Formation

If you wish to break away from your 3 plane formation at any point in the mission, you must send a message to the rest of the flight via your Radio Operator.

Fighting Engine Fires

B-17 now has a more detailed engine fire-fighting procedure.

If engine fires are not extinguished within 1 minute, the engines will suffer damage and stop functioning. If the fire persists (depending on the B-17 reliability level you have chosen) your B-17 is liable to explode between 2 and 12 minutes after the fire has started.

If your fire extinguishers are ineffective, or have been used up in a previous fire, you can try to extinguish the fire by diving your B-17 at a speed in excess of 350mph. Avoid speeds over 400mph as this will result in structural damage.

Crew Names

Crew members’ names may be changed by selecting the Name button on the Crew File Screen when this is accessed from the Crew Photo Screen between missions.

Music

Music may be switched on/off by pressing Keys ALT/S.

The Pilot’s Control Column Icon

The Pilot’s Control Column Icon is the lower of the two icons in the 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 Black Line to the Secondary Target.
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.

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.

Read Me File
The latest notes regarding this program, additions, revisions etc can be found on Disk A in an ASCII file named "READ.ME". You can read the file using standard Amiga DOS commands, eg "Type", "More". These utilities can be found on the Workbench disk.

Operating Difficulties and Loading Problems
In the vast majority of cases a loading problem is not because of faulty software, but either incorrect loading procedure or hardware fault.

Please ensure that the loading instructions have been correctly executed. The most common hardware failures are due to a misalignment of the heads in the disk drive. Such faults may be detected by loading the game on another computer.
Alternatively, a virus may have transferred into your hardware from another piece of software. Pirated copies of games are an incredibly common source of virus problems. It always pays to own original software. In the unlikely event of a software fault please return the complete package, with your receipt, to the place of purchase. MicroProse regret that goods cannot be replaced unless bought from the company directly.

If you have any difficulty while loading *B-17 Flying Fortress* or need help while running the simulation, MicroProse will be happy to assist you on the Helpline. Please ring UK 0666 504399, Monday to Friday 0900 to 1700 hours. Have a pen and paper handy when you call.

## FLIGHT SUPPLEMENT

### THE TRAINING BASE

By selecting 'Crew Training' from the Main Bomber Screen, you will be taken to a Mission Briefing and assigned a Training Mission on practice targets 'somewhere in England'.

### THE FLIGHT SIMULATOR

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

Press **Key [** (open square brackets) to move your view left and **Key ]** (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 E** 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.

Radio Compass

Pilot's Directional Indicator

Pilot's Localizer Indicator

Directional Gyro

Emergency Oil & Hydraulic Pressure Gauges (2)

Pilot/Co-Pilot Oxygen Flow Indicators

Altimeter

Airspeed Indicator

Turn and Bank Indicator
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 Lock
The banking rate of the plane is indicated by the central dot moving away to the right or left.

The Landing Gear Indicator
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.
The Navigator
- Compartment / Crew Position View
- External View
- Map View
- Mission Briefing Details
- Mouse, point and click to set estimated position.

The Radio Operator and Intercom Systems
- Compartment / Crew Position View
- Mouse, 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
- Joystick Move turret/gun
- Fine tracking on target
- Fire
- Unjam gun (manual control)

Bomb Bay

Views (only accessible if crew man taken to compartment)
- A crew man's view of the bombs
- External view
- Return to bomb bay view
COMMODORE AMIGA KEY GUIDE

CREW POSITION KEY:
- Navigator
- Gunners
- Bombardier
- Radio
- Pilot/Co-Pilot

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

For Amigas without numeric keypads see section on alternative keys.
THE CONTROLLER

The simulation can be controlled using a keyboard and a mouse and, to a limited extent, a Joystick.

THE SELECTOR

The Left Mouse Button.

AIRCRAFT SELECTION

X Next Aircraft
Z Previous Aircraft

GENERAL AIRCRAFT VIEWS

3D views from current aircraft:

<table>
<thead>
<tr>
<th>Key Combination</th>
<th>View</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shift / F1</td>
<td>Forward View</td>
</tr>
<tr>
<td>Shift / F2</td>
<td>Rear View</td>
</tr>
<tr>
<td>Shift / F3</td>
<td>Left View</td>
</tr>
<tr>
<td>Shift / F4</td>
<td>Right View</td>
</tr>
<tr>
<td>Shift / F5</td>
<td>Up View</td>
</tr>
<tr>
<td>Shift / F6</td>
<td>Down View</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Key Combination</th>
<th>View</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shift / F7</td>
<td>Tactical View</td>
</tr>
<tr>
<td>Shift / F8</td>
<td>Reverse Tactical View</td>
</tr>
</tbody>
</table>

External view from notional chase plane:

<table>
<thead>
<tr>
<th>Key Combination</th>
<th>View</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shift / F9</td>
<td>Chase View</td>
</tr>
</tbody>
</table>

External views from remote camera:

<table>
<thead>
<tr>
<th>Key Combination</th>
<th>View</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shift / F10</td>
<td>External View</td>
</tr>
</tbody>
</table>

Moving the remote camera and Window View Pilot/Co-Pilot and Bombardiers:

<table>
<thead>
<tr>
<th>Key Combination</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>PgUp</td>
<td>Pitch Up</td>
</tr>
<tr>
<td>PgDn</td>
<td>Pitch Down</td>
</tr>
<tr>
<td>Ins</td>
<td>Rotate Left</td>
</tr>
<tr>
<td>Del</td>
<td>Rotate Right</td>
</tr>
</tbody>
</table>

Pad Key

<table>
<thead>
<tr>
<th>Key</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Centres / Resets 3D Views</td>
</tr>
<tr>
<td>+</td>
<td>Zoom In</td>
</tr>
<tr>
<td>-</td>
<td>Zoom Out</td>
</tr>
</tbody>
</table>

GENERAL CONTROLS

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

PILOT/CO-PILOT

W Pilot/Co-Pilot Window View - must be controlled using PgUp, PgDown, Ins or Del.

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

<table>
<thead>
<tr>
<th>Key Combination</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;-&gt;</td>
<td>Rudder left/right</td>
</tr>
<tr>
<td>C</td>
<td>View to the left (Cockpit View/Pilot’s Instrument Panel)</td>
</tr>
<tr>
<td>J</td>
<td>View to the right (Cockpit View/Pilot’s Instrument Panel)</td>
</tr>
<tr>
<td>1 2 3 4</td>
<td>Increase power on individual engines 1-4</td>
</tr>
</tbody>
</table>
FLIGHT CHARACTERISTICS

AILERONS
ELEVATOR
RUDDER
FLAPS
ELEVATOR
AILERONS

JOYSTICK CONTROL COLUMN
DIVE
LEFT
RIGHT
CLIMB

CURSOR KEYS CONTROL COLUMN
DIVE
TURN LEFT
TURN RIGHT
CLIMB

RUDDER KEYS
LEFT
RIGHT

TECHNICAL AND FLIGHT SUPPLEMENT
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.

1234 Increase power on individual engines 1-4
Shift / 1234 Maximum power on engines 1-4
5678 Decrease power on individual engines 1-4
Shift / 5678 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 / 1234 Start/Stop (feather) engines 1-4
Alt / 1234 Extinguish Fire on 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)

NB Any control that starts a motor will take time to function.

THE TAKE OFF

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 and join the other two planes.

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

Select an appropriate External View (F then PgUp/PgDown/Ins/Del) and 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

Return to the Pilot's View (W). 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 to 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.

Climbing and Cruising

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.
If you experience difficulty in finding the other planes, switch to computer control or use ALT/T skip time.

Once you have joined the other planes of your squadron in formation, the flight will strike out towards the first Waypoint.

**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).

The landing procedure differs depending on whether you are in formation or not when you reach Alconbury (Home Base).

In Formation The formation will circle Alconbury descending to an altitude of about 2,000ft. At this point, the Alconbury control tower will radio ‘Permission to Land’. When this happens, the computer controlled pilot will break away from the formation to begin his landing approach and will land the aircraft unless you take manual control (by selecting the Pilot and Key M). If you wish to land immediately, before landing permission is granted, you must send a radio message requesting permission to land, then wait for the reply from the Tower to start the landing sequence.

Out of Formation The Control Tower will ask whether you want permission to land. You should reply with a radio message requesting permission, then perform a normal landing: Lower your Flaps and drop your Landing Gear. Keep engine rpm’s to 2000 at about 130mph.

**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 when you feel the plane slowing down from its roll. The B-17 should then slow down and stop.
<table>
<thead>
<tr>
<th>Icon</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1.png" alt="Icon" /></td>
<td>Pilot's/Co-Pilot's Control Column Icon</td>
</tr>
<tr>
<td><img src="image2.png" alt="Icon" /></td>
<td>Navigation Icon</td>
</tr>
<tr>
<td><img src="image3.png" alt="Icon" /></td>
<td>Radio Operator Icon</td>
</tr>
<tr>
<td><img src="image4.png" alt="Icon" /></td>
<td>Bombardier Icon</td>
</tr>
<tr>
<td><img src="image5.png" alt="Icon" /></td>
<td>Gun position Icon</td>
</tr>
<tr>
<td><img src="image6.png" alt="Icon" /></td>
<td>Turret Repair Icon</td>
</tr>
<tr>
<td><img src="image7.png" alt="Icon" /></td>
<td>First Aid Icon</td>
</tr>
<tr>
<td><img src="image8.png" alt="Icon" /></td>
<td>All Crew Bail Out Icon</td>
</tr>
<tr>
<td><img src="image9.png" alt="Icon" /></td>
<td>Crew File Icon</td>
</tr>
<tr>
<td><img src="image10.png" alt="Icon" /></td>
<td>Fight Fire Icon</td>
</tr>
<tr>
<td><img src="image11.png" alt="Icon" /></td>
<td>Unjam Guns Icon</td>
</tr>
<tr>
<td><img src="image12.png" alt="Icon" /></td>
<td>Move Crewman Left Icon</td>
</tr>
<tr>
<td><img src="image13.png" alt="Icon" /></td>
<td>Move Crewman Right Icon</td>
</tr>
<tr>
<td><img src="image14.png" alt="Icon" /></td>
<td>Manually Lower Gear Icon</td>
</tr>
<tr>
<td><img src="image15.png" alt="Icon" /></td>
<td>Manually Raise Gear Icon</td>
</tr>
<tr>
<td><img src="image16.png" alt="Icon" /></td>
<td>Manually Open Bomb Bay Icon</td>
</tr>
<tr>
<td><img src="image17.png" alt="Icon" /></td>
<td>Manually Close Bomb Bay Icon</td>
</tr>
<tr>
<td><img src="image18.png" alt="Icon" /></td>
<td>Manually release bombs Icon</td>
</tr>
<tr>
<td>Role</td>
<td>MOUSE</td>
</tr>
<tr>
<td>--------------------</td>
<td>-------</td>
</tr>
<tr>
<td>Bombardier</td>
<td>•</td>
</tr>
<tr>
<td>Release Bombs</td>
<td></td>
</tr>
<tr>
<td>Bombsight Tracking</td>
<td>•</td>
</tr>
<tr>
<td>Pilot/Co-Pilot</td>
<td></td>
</tr>
<tr>
<td>Control Column</td>
<td>•</td>
</tr>
<tr>
<td>Simulation</td>
<td></td>
</tr>
<tr>
<td>Gunners</td>
<td></td>
</tr>
<tr>
<td>Move Turret/Gun</td>
<td>•</td>
</tr>
<tr>
<td>Fire Guns</td>
<td>•</td>
</tr>
<tr>
<td>Navigator</td>
<td></td>
</tr>
<tr>
<td>Move Navigation</td>
<td></td>
</tr>
<tr>
<td>Marker</td>
<td></td>
</tr>
<tr>
<td>Fix Estimated</td>
<td></td>
</tr>
<tr>
<td>Position</td>
<td></td>
</tr>
<tr>
<td>Radio Operator</td>
<td></td>
</tr>
<tr>
<td>Choose Icon/Message</td>
<td>Move Mouse Pointer</td>
</tr>
<tr>
<td>Select Icon/</td>
<td></td>
</tr>
<tr>
<td>Transmit Message</td>
<td></td>
</tr>
</tbody>
</table>
Locations specified are the locations where the shots were taken, other targets of the same type are very similar.

<table>
<thead>
<tr>
<th>VI/V2 ROCKET SITE - FRANCE</th>
<th>DRY DOCKS - NANTES</th>
</tr>
</thead>
<tbody>
<tr>
<td>OIL REFINERY - ASCHAFFENBURG</td>
<td>FACTORY COMPLEX - BERLIN</td>
</tr>
<tr>
<td>ARMY DEPOT - AACHEN</td>
<td>FACTORY COMPLEX - AUGSBURG</td>
</tr>
<tr>
<td>DRY DOCKS - CUXHAVEN</td>
<td>FACTORY COMPLEX - EINDHOVEN</td>
</tr>
</tbody>
</table>
Additional Credits for the Amiga version of *B-17 Flying Fortress*

Andrew Walrond | Software
Suzy Lockyer   | Artwork
Steve Ramsden | Amiga Version Project Manager