



# B-24 Liberator

For Microsoft FSX plus Acceleration, FSX Steam Edition, and Lockheed Martin P3D



**This is a complex simulation. To get full enjoyment of the aircraft in this package, please read this Manual thoroughly and carefully.**

**Warning: The manual and models in this package must not be used for real flight training purposes.**

## History

The Consolidated B-24 Liberator is an American heavy bomber, designed by Consolidated Aircraft of San Diego, California. It was known within the company as the Model 32, and some initial production aircraft were laid down as export models designated as various LB-30s, in the Land Bomber design category.

At its inception, the B-24 was a modern design featuring a highly efficient shoulder-mounted, high aspect ratio Davis wing. The wing gave the Liberator a high cruise speed, long range and the ability to carry a heavy bomb load. Early RAF Liberators were the first aircraft to cross the Atlantic Ocean as a matter of routine. In comparison with its contemporaries, the B-24 was relatively difficult to fly and had poor low-speed performance; it also had a lower ceiling and was less robust than the Boeing B-17 Flying Fortress. While aircrews tended to prefer the B-17, General Staff favored the B-24 and procured it in huge numbers for a wide variety of roles. Approximately 18,500 B-24's were built, and holds the record as the world's most produced bomber, heavy bomber, multi-engine aircraft, and American military aircraft in history.

The B-24 was used extensively in World War II. It served in every branch of the American armed forces as well as several Allied air forces and navies. It saw use in every theater of operations. Along with the B-17, the B-24 was the mainstay of the US strategic bombing campaign in the Western European theater. Due to its range, it proved useful in bombing operations in the Pacific, including the bombing of Japan. Long-range anti-submarine Liberators played an instrumental role in closing the Mid-Atlantic gap in the Battle of the Atlantic.

The C-87 transport derivative served as a longer range, higher capacity counterpart to the Douglas C-47 Skytrain.

(source: Wikipedia)

## General Notes:

1. Ctrl-E can be used for startup, as well as the starter switches in the cockpit. The VC startup has been slightly simplified from the crank and start used on our C-54, for example, in order to ensure maximum performance across a range of computer capabilities, as this model would otherwise be very demanding for the computer systems of many users.
2. The B-24 did not have fuel gauges or generator switches in the cockpit. As your duties are solely as pilot, to set and read fuel levels use the drop down simulator menu. if your pre-flight fuel calculations are accurate, you should seldom have to do this. A generator switch has been unobtrusively provided in place of a seldom-used switch (see cockpit illustration).
3. Pulling the Bomb Release handle will make the bombs disappear. To simulate the loss of weight, use the drop down "Vehicle" / "Fuel and Payload" / "bombs" menu, and change the weight to 0.
4. Navigation was handled by the Navigator and instructions communicated to the pilot. As there is no Navigator in the sim, use the pop-up window (Shift-1) to use the nav and com radios and gauges. The Autopilot will also be used from this window.
5. Supercharging is handled by FSX as a linear constant, which is accurate, but doesn't allow for the manual or electrical adjustment that was used by the turbosupercharging of the B-24. The supercharger controls are either on or off, but will work to give 49" of manifold pressure up to 23,000 ft. **(In P3Dv4.5 and up, these controls do not work, but the supercharging option in the aircraft.cfg will give the necessary MP.)**
6. Although an **uninstall.exe** is provided, it's highly recommended that you **manually** remove the aircraft itself from the 'FSX/P3D ...\Airplanes' folder and leave the other files. The other files take up very little space, and this will prevent unintentional removal of files needed for other Flight Replicas aircraft. If you do use the uninstall.exe, make sure to backup the following gauge (FSX/P3D...\Gauges) and store in a separate folder in case you uninstall the B-24, in which case it will need to be replaced:
 

Bendix\_king\_radio.dll  
 mooney\_bravo.dll
7. **GPS:** The pop-up GPS is the default sim gauge. Please refer to the simulator for instruction on how to operate.
8. **Paint Kits:** These are available on the Flight-Replicas.com 'Downloads' page here: <http://www.flight-replicas.com/Downloads.htm>
9. **Support:** Please see the last page of this Manual.

From the Pilot Manual:

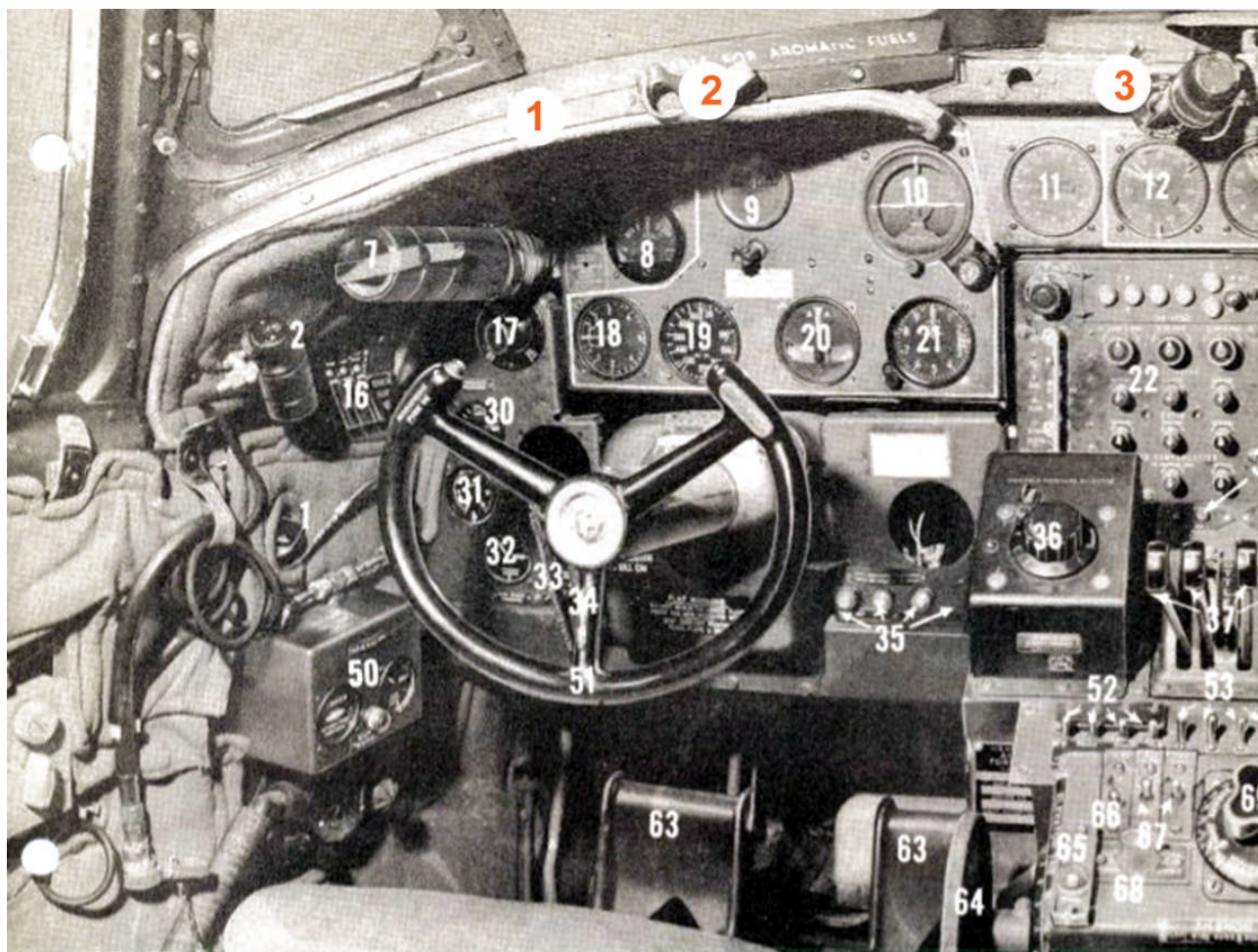
**NOTE:**

It is impractical to include in a manual of this kind all data for all series. The object is to give the pilot a general picture of the B-24 airplane. It is your obligation to note and investigate the

individual differences in the particular airplane you are flying. Refer to the technical orders available in the airplane and at your base. Remember that you can never know too much about your airplane.







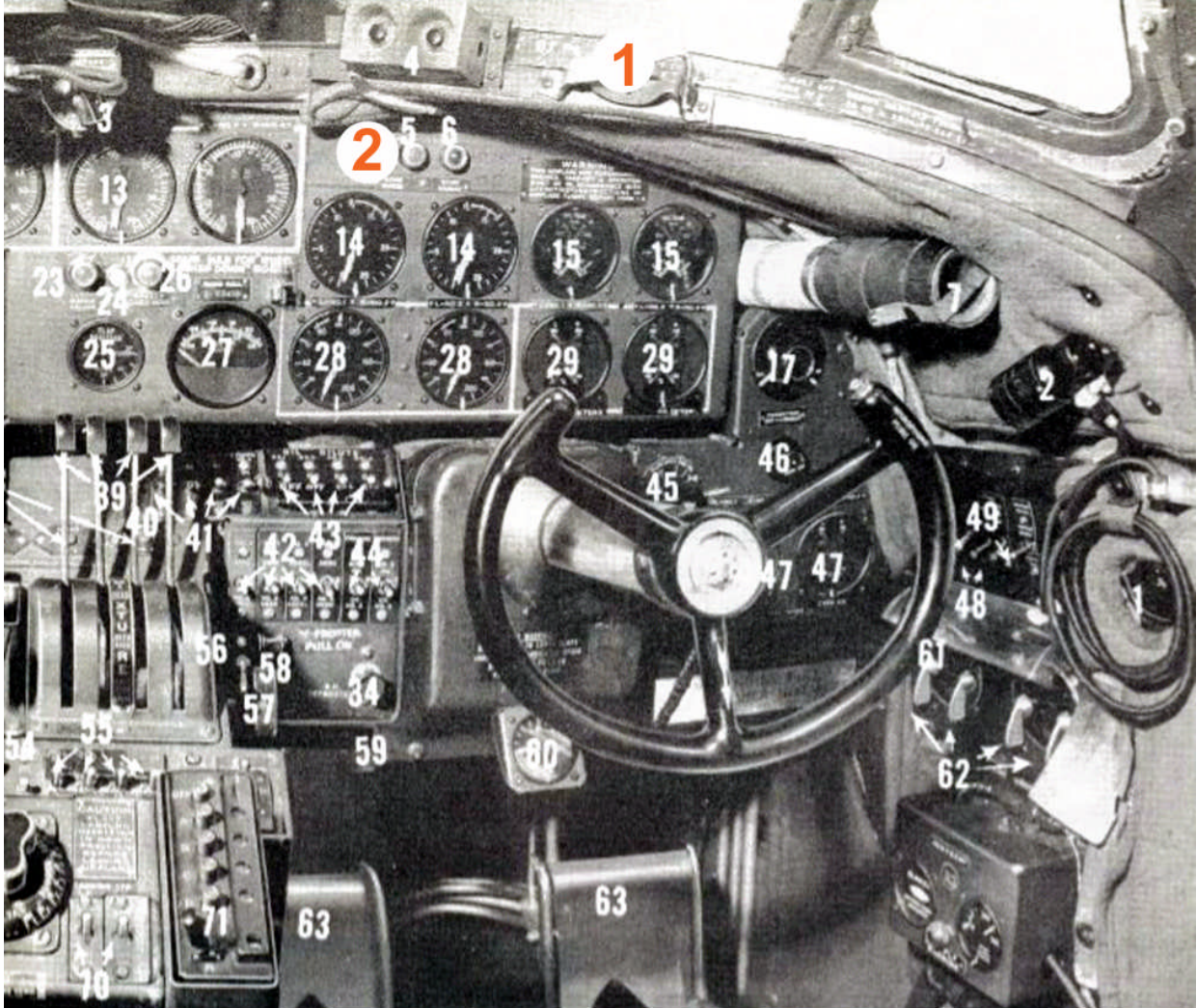
## *Cockpit of the Liberator...*

- |                                    |   |
|------------------------------------|---|
| 1. Fluorescent Light Switches      | 19. Airspeed Indicator                      |
| 2. 24 Volt DC Fluorescent Light    | 20. Turn and Bank Indicator                 |
| 3. Magnetic Compass Light Rheostat | 21. Altimeter                               |
| 4. IFF Radio Destroyer Switch      | 22. C-1 Automatic Pilot <i>Use 2D Panel</i> |
| 5. Bomb Doors Indicator            | 23. Marker Beacon Indicator                 |
| 6. Bomb Release Indicator          | 24. Landing Gear Indicator Test Button      |
| 7. Defroster Ducts                 | 25. Flap Position Indicator                 |
| 8. Pilot Director Indicator        | 26. Landing Gear Indicator                  |
| 9. Directional Gyro                | 27. Free Air Temperature Gage               |
| 10. Gyro Horizon                   | 28. Oil Pressure Gages                      |
| 11. Radio Compass Indicator        | 29. Oil Temperature Gages                   |
| 12. Manifold Pressure Gages        | 30. Hydraulic Pressure Gages                |
| 13. Tachometers                    | 31. Suction Gage                            |
| 14. Fuel Pressure Gages            | 32. Inboard Brake Pressure Gage             |
| 15. Cylinder Temperature Gages     | 33. Outboard Brake Pressure Gage            |
| 16. Chemical Release Switches      | 34. Defroster Controls                      |
| 17. Ventilators                    | 35. Propeller Governor Limit Lights         |
| 18. Rate-of-climb Indicator        | 36. Turbo Boost Selector <i>On/off only</i> |

Click Spots:

1. Pilots
2. Crew to take-off and landing positions.
3. Panel Lights on/off



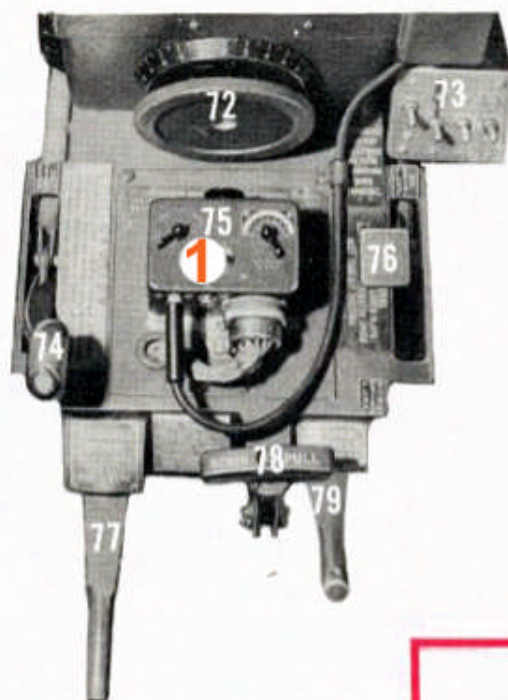


- |   |                                   |
|---|-----------------------------------|
| 37. Throttles   | 55. Cowl Flap Switches            |
| 38. Propeller Feathering Circuit Breakers               | 56. SCR 535 Power Switch          |
| 39. Mixture Controls                                    | 57. Throttle Friction Lock        |
| 40. Bomb Bay Fuel Transfer Switch                       | 58. SCR 535 Emergency Switch      |
| 41. Booster Pump Switches                               | 59. De-icer Control               |
| 42. Engine Starter Switches                             | 60. De-icer Pressure Gage         |
| 43. Oil Dilution Switches                               | 61. Emergency Ignition Switch Bar |
| 44. Primer Switches                                     | 62. Ignition Switches             |
| 45. Anti-icer Control                                   | 63. Brake Pedals                  |
| 46. Formation Lights Rheostat                           | 64. Elevator Tab Control Wheel    |
| 47. Carburetor Air Temperature Gages                    | 65. Alarm Button                  |
| 48. Main Storage Battery Switches                       | 66. Passing Light Switch          |
| 49. <del>Heater and Defroster Switches</del> Generators | 67. Navigation Light Switches     |
| 50. Oxygen Panels                                       | 68. A C Inverter Switch           |
| 51. Pilot's Wheel                                       | 69. Rudder Tab Control Knob       |
| 52. Propeller Switches                                  | 70. Landing Light Switches        |
| 53. Intercooler Shutter Switches                        | 71. SCR 522 Control Box           |
| 54. Pitot Heater Switch                                 |                                   |

Click Spot:

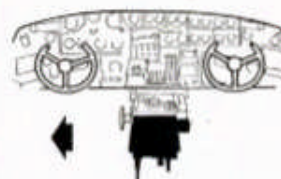
- 1. Ball Turret / Radome up/down
- 2. Bomb Doors open/close





- 72. Aileron Tab Control Wheel
- 73. Recognition Light Switches
- 74. Landing Gear Control Lever
- 75. Command Radio Transmitter Control Box
- 76. Wing Flap Control Lever
- 77. Parking Brake Handle
- 78. **Emergency** Bomb Release Handle
- 79. Controls Lock Handle

#### BASE OF CONTROL PEDESTAL



- 80. Propeller Feathering Switches
- 81. Clock
- 82. Remote Indicating Compass
- 83. Magnetic Compass

Click Spot:  
1. Radios on/off

## Propeller RPM & Cowl Flap Switches

The B-24 has two methods to operate the RPM and cowl flaps: collectively and individually (individually, in case you need to shut down just one engine, for example).

The black areas in front of and behind the switches are for collective adjustment. The switches themselves are for individual adjustment.



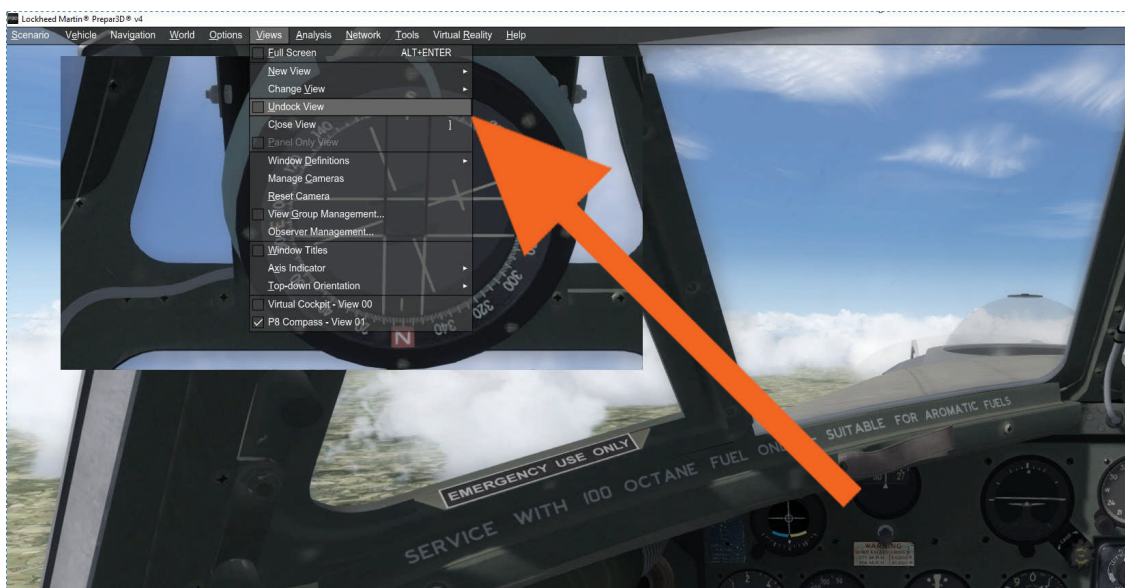
1. Decrease and increase RPM (the side used reflects the plate that would normally be flipped up to move all the switches together).
2. Individual RPM switches
3. Decrease and increase cowl flap position (the side used reflects the plate that would normally be flipped up to move all the switches together).
4. Individual cowl flap switches.



# Notes on RAF Cockpit

RAF (and RCAF) B-24's had P8 magnetic compasses, mounted inverted above the throttles. In the real aircraft, a mirror was used to see the compass. To see the compass, use the following method:

1. On Menu Bar, click through the Views/New View/Cockpit and then click on the “P8 Compass” window. The compass will appear.
2. Click “Undock View” (see image);



3. Slide window over (see image), then click main large view to keep compass in view.



...Cont'd.

These aircraft also had an auxiliary navigation panel, equipped with a radio compass. For this simulation, the two pointers are slaved to two ADF/NDB channels, the radios for which can be accessed via the Shift-1 pop-up panel.





# Flying the B-24

(Note: Use together with Check List)

## TAKE-OFF

Take-offs are easy and smooth in the B-24 provided there is plenty of room and you use proper technique. Tricycle gear improves both the take-off and landing characteristics. Be sure before you leave the line that the runway is long enough (considering altitude, temperature, etc.) and be sure there are no obstructions in your line of flight.

### *Taxiing Into Position:*

Get your clearance from the tower to line up on the runway. Take a good look for aircraft and taxi out in a wide sweep using a minimum of runway for straightening the nose wheel. Stop the airplane lined up straight ahead, hold your position with the brakes, and set all throttles at **1000 rpm**. Both pilot and copilot should make a final quick check on all instruments.

### *Take-off:*

Then copilot obtains a radio clearance for takeoff and you are ready for the take-off run.

### *The Take-Off Run:*

1. Release the brakes and slowly but steadily advance all throttles together. Learn to apply power at the speed engines can readily take it. Never jam or stiff-arm the throttles.
2. If you start to move to the left of the middle of the runway lead the throttles on the left, and vice versa. Don't stop the opposite set of throttles, but instead lead all throttles progressively. In this manner you can build up speed rapidly and obtain rudder control
3. As soon as you have rudder control, use it! Come in with lots of rudder to hold your line down the runway, rather than using excessive and unnecessary build-up of power on one side.
4. Copilot follows throttles through with his left hand, and as soon as they are against the stops he sets the friction lock to prevent throttles from creeping but so they still can be easily moved. Note: Pilot's hand should be on the throttles throughout the take-off except when necessary to trim the plane or signal the copilot. Whenever pilot's hand leaves the throttles, copilot should hold them. Copilot should closely observe all instruments (particularly manifold pressure and rpm). Use full throttle on take-off. This shortens the run and minimizes wear and tear on tires and gear.
5. As your speed increases to **70 or 80 mph**, ease back on the control column just enough to relieve the nose wheel of its weight. When full weight is on the nose wheel, the wing is at a negative angle of attack; lifting the weight puts the wing in the desired slightly positive angle.
6. Hold this attitude straight down the runway, and the airplane will fly itself off the ground at **120 to 130 mph**, depending on the gross weight. Don't haul it off, however, and be sure the attitude is correct. If you apply too much back pressure, pulling the nose too far up, you establish too great an angle of attack, which creates more lift and puts the plane into the air at a lower airspeed -110 mph, for example. Then, if you lower the nose to pick up airspeed, you decrease the angle of attack and therefore decrease the lift. The airplane cannot accelerate fast enough to compensate for this changed angle, and the result will be that you settle back on, the ground. So

don't try to make the airplane fly-let it fly itself. Once it does, increase the back pressure just enough to establish a shallow positive climb, and hold it.

#### START YOUR TAKEOFF RUN

RELIEVE NOSE WHEEL OF ITS WEIGHT

AIRPLANE WILL FLY ITSELF OFF

**7.** Don't become over-anxious about building up climbing speed. It takes time for the power of the propeller thrust to overcome the inertia of a heavy airplane. Beware of lowering the nose below level flight to build up airspeed. Always make all changes of attitude gradually, a little at a time. Make frequent small changes rather than large ones. As your airspeed increases, relieve heavy fore or aft control pressure by trimming. Establish and hold proper attitudes in the B-24 by reference to flight instruments rather than to outside objects. It's an instrument plane.

Attain a minimum airspeed of **140 MPH** and a safe altitude above all objects before first power reduction.

### THE CLIMB

You will judge the proper angle of climb by obstacles to be cleared, airspeed and the flight indicator. The best average airspeed for the climb after completing the after-take-off check (wheels up, flaps up, etc.) is **150 to 160 mph**. Pilot should relieve control pressures by proper trimming. Both pilot and copilot should keep a roving eye on all instruments to see that power, temperatures and pressures all stay within limits.

Throughout all climbs mixture controls should be in "AUTO-RICH," for at high power it is necessary for the proportion of fuel to air to be relatively high to suppress detonation and assist in cooling.

#### Climb Power Settings

Desired: rpm 2550 MP 35 (unlimited time)

Maximum: rpm 2550 MP 38 (1 hr max.)

### LEVELLING OFF

Always level off for cruising from the top in both speed and altitude. The purpose of this is to let the airplane build up full momentum for cruising. If you go directly from a climb to level flight with a B-24, and reduce power, it will mush along at a high angle of attack and in a high drag attitude while trying to gain speed. It will fly sluggishly and inefficiently. The heavier your load, the more important it is to level off properly.

#### Levelling-off Procedure

1. Continue your climb 300 to 500 feet above the desired cruising altitude.
2. Level off, drop the nose slightly to get on the step and pick up speed.
3. Reduce power to cruising setting and gradually descend to your cruising altitude.
4. Synchronize propellers and trim the airplane



## CRUISE

2325 RPM  
35 MP

## AIRSPEED LIMITATIONS

Limiting Factor - Maximum Indicated Airspeed

40° Flaps	155 mph
10° Flaps	180 mph
Lowering Landing Gear.	155 mph
41,000 lb. Gross Weight	355 mph
56,000 lb. Gross Weight	275 mph

**Automatic Pilot.** Do not operate the automatic pilot when flying at less than an indicated airspeed of **155 mph** or when flying in extremely turbulent air.

**Extremely Turbulent Air:** Slow down to IAS of **150 mph**.

Maximum Gross Weight of 56,000 lbs.: Do not attempt other than normal flight.

Emergency Maximum Gross Weight of 64,000 lb.: Do not attempt other than normal flight.

Operate only from smooth fields and do not exceed cruising speeds until load has been expended to 56,000 lb.

**CAUTION:** All speeds given in this manual have been test flown but speeds will vary slightly from airplane to airplane, of the same weight and series. Speeds given serve as a basic guide only.

## DESCENT TO LANDING AREA

The B-24 is built for long missions at high altitudes. Just as in climbing or cruising, the descent from altitude can be sloppy or skilful depending on the knowledge and foresight of the pilot.

**Normal Cruising Descent.** It saves time, fuel and maintains engine performance to plan your descent ahead. Two factors govern a normal descent: distance from the landing area, and desired rate of descent.

In a normal cruising descent the object is to come down at the rate of approximately **200 feet a minute**, using normal cruising power settings, so that you will arrive at an altitude 500 to 1000 feet above traffic as you near the landing area. It is poor planning and wastes fuel to arrive above the field 6000 to 10,000 feet high and then chop power and come down like an elevator. You waste time over the field and cool the engines too rapidly.

Good Procedure

1. Plan your descent. To come down 10,000 feet at 200 feet a minute would require 50 minutes. In that case you would start your descent about an hour out from the field. From 20,000 feet you would start descending 1 hour and 40 minutes out.
2. Lower the nose to establish the desired rate of descent. It isn't advisable to exceed **200 miles an hour**.

3. Trim to maintain a steady, constant rate of descent. To increase the rate of descent, reduce power. This avoids building up excessive airspeed. With this procedure you are getting greater efficiency from fuel, saving time, and placing minimum strain on the airplane.

**Quick Descent Without Exceeding Airspeed.** When it is necessary to make a quick descent, don't point the nose down and dive at excessive airspeeds. A good method is to reduce manifold pressure to **18" or 20"** and bring the indicated airspeed down to **160 mph** before lowering the nose. Don't lower the nose before you have dissipated airspeed or the inertia of the B-24 will keep you moving at high forward speed. Hold approximately **160 mph**.

## LANDING

See Check list.

**Get on the Step.** Get up on the step just as soon as your wing flaps are down **10°**. Remember: Control airspeed with attitude and control ascent and descent with power. If airspeed starts to drop, lower the nose until you are holding the desired airspeed and ease on more power to maintain your desired altitude. Don't jockey your attitude and power so that one correction throws the other off. If the airplane is mushing with nose high and you add power, it will keep right on mushing with only slow gain in airspeed. To regain airspeed and eliminate the mushing effect with the least possible delay, the nose should be lowered slightly as the power is added.

**Time Your Distance Out.** You are flying a reciprocal gyro heading parallel to the landing runway. As you pass a point opposite the end of the runway, start timing yourself. Usually you will fly 20 to 30 seconds and then start a standard rate (one needle width) turn into your base leg. The turn will carry you about 3/+ mile farther out from end of the runway this will put your base leg approximately 2 miles from the edge of the field. Your heading and turns are controlled entirely with reference to instruments. Watch your time, and turn on your base leg to make good a gyro heading perpendicular to the landing runway.

**Base Leg.** If you have followed approved procedure, you will be free on the base leg to fly your gyro heading, observe traffic ahead, and look over the approaches to the landing strip. This gives you a chance to judge your distance out from the end of the runway in relation to altitude. The success or failure of a landing depends largely on a good entry into your final approach.

**Turning On Final Approach.** When to start your turn on final approach is important. The common tendency is to wait too long. Lead your standard-rate turn, approximately 3/4 of a mile. Then your rollout will bring you into final approach in line with the runway.

**Half Flaps:** Pilot calls for half flaps just before starting the turn into final approach, and copilot lowers them to 20° position.

**Power Reductions:** As the flaps come down, pilot reduces his power. Pilot should hold a level turn until **20° flaps** and reduced power bring airspeed down to **135 mph**.

**Line Up With the Runway.** Be sure you are lined up with the runway. If not, rudder over at once before you get too close to the field. You may roll out to the right or left of the runway and you can usually correct this with rudder and little or no bank if you start far enough back.

**Make Good a Point.** Pick a point about **10 feet** short of the runway and line it up with a rivet or reference point on the nose. You are making good this point in your descent if you keep it lined up with the reference point on the airplane. If the point on the ground drops below your reference line, you are overshooting it; if the point moves above the reference line you are undershooting it. Don't try to judge your flight path by a projection of your longitudinal axis.



**Airspeed:** Maintain **125 to 130 mph** in your glide. With full flaps down you can control your descent with power. A good, normal rate of descent is **500 feet a minute** at **15" to 18" of manifold pressure**. If undershooting, increase power to cut your rate of descent; if overshooting, decrease power to increase your rate of descent. In either case, maintain a constant approach airspeed.

**Flare-Out:** Start your flare-out high enough, about **150 feet up**. It takes time to change the direction of a 4-engine bomber. Your airspeed will decrease gradually as you gradually raise the nose and reduce power.

**Coordination of Power and Attitude:** Your flare-out and reduction of power should be perfectly coordinated. If too high, reduce power; don't steepen your gliding angle and build up excessive airspeed. If you are coming in just right, power should be blended off in almost perfect coordination with your round out. If you are flaring out short, let your power lag behind the flare-out to carry you farther in; if you are too high, bring power off a little faster to ease the airplane to the ground more quickly. Properly executed, the flare-out will bring the airplane in just above the runway surface at **105 to 110 mph** in a definitely nose up attitude, sinking at a rate that will grease it into the runway. Power keeps down your rate of descent and prevents the airplane from hitting the runway with a heavy jolt.

**Landing Roll:** Hold the nose up with the elevators and maintain directional control with the rudders. In a nose-high attitude the drag of the wings and flaps reduces speed rapidly. Keep the nose high until it tends to want to come down-usually at **70 to 75 mph**. Then lower the nose wheel smoothly to the runway. When the nose wheel is solidly on the ground (and not before), begin braking.

**Brakes:** Feel out the brakes early so you will know what to expect of them. If you have plenty of room, use it and save your brakes, but remember it is better to use brakes too early than too late. Get the airplane slowed down with a reasonable amount of room to spare. Use brakes progressively. Apply them and then release them. Don't sock them on and leave them. And don't leave the weight of your toes on the brakes when not applying them, because the heat generated may crack a drum or burst an expander tube.

**Clear the Runway.** Clear the runway promptly. The pilot behind you may have lost his hydraulic brake pressure and not know it, or may need all the runway.



# Check List

(Note: "(n/a)" signifies not applicable to the simulator aircraft).

## **Official A.A.F. Pilot's Check List B-24D, G, H, J, L, and M, RB-24E, Navy PBY-1**

### **Before Starting Engines**

1. Check Form 1A. (n/a)
2. Check Weight and Balance.
3. Wheel chocks, In place. (n/a)
4. Pitot covers, Removed.
5. Fuel tank caps, Checked.
6. Flight Controls, Checked.
7. Fuel tanks valves (n/a) and amount, Checked.
8. Generator switches, OFF.
9. Carburetor air filters, As required. (n/a)
10. Main line and battery switches, ON.
11. Auxiliary power unit and hydraulic pumps, ON.
12. Brake pressure and parking brake, Checked and ON.
13. Gyros, UNCAGED.
14. Auto pilot, OFF.
15. Superchargers, OFF.
16. Propellers, High RPM.
17. AC power switch, ON. (n/a)
18. Intercoolers, OPEN
19. Pitot heater, Checked.
20. Cowl flaps, OPEN.
21. Mixtures, IDLE CUT-OFF.
22. Wing flaps, UP.
23. Wing, propeller and carburetor de-icers, OFF.
24. Alarm bell, Check.
25. Nose wheel lock clamp or solenoid pin, In place. (n/a)

### **Start Engines**

1. Call clear, fire guard, Posted.
2. Ignition switches, ON. (n/a)
3. Throttles, Set.
4. Booster pumps, ON.
5. Start engines, Check oil pressure.
6. Flight Indicator, Check righting.

**Before Taxiing**

1. All instruments, Checked.
2. Vacuum, Check.
3. Radio, altimeter and time, Checked.
4. Alarm Bell, Check.
5. Wheel chocks, Removed. (n/a)
6. Center nose wheel.
7. Mixtures, AUTO RICH.

**Before Take-Off**

1. Trim tabs, Set for take-off.
2. Mixtures, AUTO-RICH.
3. Exercise propellers, superchargers and flaps. (n/a)
4. Propellers, High RPM.
5. Run up engines.
6. Superchargers, Set and locked. (n/a)
7. Gyros, Set and uncaged.
8. Wing flaps, 20 degrees.
9. Flight Controls, Checked.
10. Doors and hatches, Closed.
11. Auxiliary hydraulic pumps, ON. (n/a)
12. Auxiliary power unit, OFF. (n/a)
13. Cowl flaps, Trail.
14. Booster pumps, ON.
15. Generator switches, ON.
16. Crew to stations (Nose clear).

**After Take-Off**

1. Wheels, UP (Brakes applied).
2. Superchargers, Set for climb. (n/a)
3. Throttles, set for climb.
4. Propellers, 2550 RPM.
5. Wing flaps, UP.
6. Booster pumps, OFF.
7. Cowl flaps, As required.
8. Auxiliary hydraulic pump, OFF. (n/a)

**Before Landing**

1. Altimeter setting, Checked.
2. Crew to stations (Nose clear).
3. Auxiliary hydraulic pump, ON. (n/a)
4. Brake pressure and parking brake, Checked and OFF.
5. Auto pilot, OFF.



6. Heater master switch, OFF. (n/a)
7. Gear, DOWN.
8. Mixture, AUTO-RICH.
9. Propellers, 2400 RPM.
10. Intercoolers, OPEN.
11. Cowl flaps, As required.
12. Booster pumps, ON.
13. Wing de-icers, OFF.
14. Wheels, Checked, light on, handle neutral (n/a).
15. Ball turret and trailing antenna (n/a), Retracted.
16. Wing flaps, 10 degrees.

### **Final Approach**

1. Propellers, 2400 RPM.
2. Superchargers, Set and locked. (n/a)
3. Wing flaps, 40 degrees.
4. Airspeed, Call out.

### **Go-Around**

1. Power, Applied.
2. Air speed, Check.
3. Wing flaps, 20 degrees.
4. Wheels, UP.

### **End of Landing Roll**

1. Superchargers, OFF.
2. Booster pumps, OFF.
3. Propellers, High RPM.
4. Generators, OFF.
5. Wing flaps, UP.
6. Cowl flaps, OPEN.
7. Auxiliary power unit, ON. (n/a)
8. Brake pressure, Checked.

### **To Secure Airplane**

1. Engines, Stopped.
2. Switches, OFF.
3. Wheel chocks, In place. (n/a)
4. Gear handle, DOWN.
5. Flight controls, Locked. (n/a)

**Sounds:** Sounds in this package are a combination of default and custom.

**Gauges:** Sounds in this package are a combination of default and custom.

## Thank You:

A huge thank you to those who helped on the project, not the least the “pre-painters”, among the best out there, who so generously volunteered to provide a great number of paint schemes before the B-24’s were even released. Flight simulation is one of the great hobbies, and it’s people like this who make it so. Alphabetically by forum names:

**Bomber\_12 (John Terrell)**  
**jankees (Jan Kees Blom)**  
**Jeansy (Matt Levi)**  
**Tgycgijoes (Richard Lund)**

You can find links to these painters on the Flight Replicas website’s B-24 product page

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### Support:

[support@flight-replicas.com](mailto:support@flight-replicas.com)

All requests for support must be accompanied by the following information:

1. Place/website where the B-24 Liberator was purchased;
2. Order number;
3. Name used when purchasing; and
4. Date of purchase.

No support will be available without this information.

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