

FSX Douglas C-117D, Super DC-3, R4D-8, V.2

This package fully replaces V1 Beta, correcting various errors and omissions. The model features a "modern" VC, a realistic slow radial engine start, a fuel and payload manager, built-in failure conditions, improved engine textures and new engine-focused cameraviews. Sound is aliased to the default DC-3. Three C-117D Expansion Packs will be available separately from Sim-Outhouse: a custom sound set by Ted "Tufun" Wolfgang, and a paintkit and two alternate VC texture sets by Gordon "Gman" Madison. Historical research by John Detrick, models by Manfred Jahn, flight dynamics by Alexander M. Metzger, gauges, animations, and failure conditions by Hansjoerg Naegele. Startup smoke effect by Ted Wolfgang.

In the official Flight Manual, the C-117D is described as "a medium-range, low-wing land aircraft designed for use as a diversified cargo, personnel, or ambulance transport." Originally intended as a DC-3 replacement, the Super 3 had a stretched fuselage, more powerful engines, a retractable tail wheel, square-tipped slightly swept wings, and an enlarged fin and tailplane. While it could carry significantly more payload at faster speeds, it proved no match for new-generation aircraft such as the Convair 240. Only three Super 3s were commercially operated by Capital Airlines based in Washington DC. However, one hundred U.S. Navy and Marines Super 3s did see extended service all over the world under the designations R4D-8 (early years) and C-117D (1962 onwards). The last military C-117D was withdrawn from use in June 1982. A few civilian Super 3s are still in flyable condition today.

Minimum system-requirements: FSX SP2. Recommended: FSX Gold Edition or Acceleration.

INSTALLATION

(1) Extract the zip to a temporary folder or open it in Windows Explorer.

(2) You should see three subfolders: Effects, Simobjects, and Sound. Copy these three folders directly to your main "Flight Simulator X" folder using "merge" or "integrate folders" mode when asked (do NOT use "replace"). Should you have any misgivings about this procedure play it safe, i.e. enter the source subfolders individually and copy the files to the appropriate FSX destination folders.

(3) Users of a currently installed C-117D (V1 Beta) should accept overwriting files from the Sound and Effects destinations. After installation, move the old folder "Douglas_C-117D" to a safe backup location **outside** FSX. If you want to use previously downloaded paints, copy these over to the new folder. Remember to edit the [fltsim] sections in the new folder's aircraft.cfg to activate the paint schemes copied over.

(4) The single aircraft provided in this version will show up as "Douglas C-117D V2" in the Flight Simulator's aircraft selection menu.

SIM-OUTHOUSE C-117 EXPANSION PACKS

In order to use Sim-Outhouse's Add-Ons Library you have to be registered as a member. Membership is free at <http://www.sim-outhouse.com>

- (1) For Ted "Tufun" Wolfgang's sound pack download "TW Radial Twin Sound Package.zip" and follow the instructions in the Readme.
- (2) For Gordon "Gman" Madison's alternate VC texture sets download VCtextures_C117.zip and follow the instructions given in the Readme.
- (3) For Gordon's paint kit download the package Paintkit_C117.zip and follow the instructions given in the Readme.

FSX OPERATION NOTES

- (1) Fly this aircraft gently, following the checklist. If you don't you will sooner or later experience a failure condition from which it may be difficult to recover. The checklist is accessible via the usual Shift-F10 keypress. You can also click on the pilot's clipboard to get an abbreviated list without FSX-specific tips (for experienced pilots).
- (2) **Control Panel.** While this model has no 2D panel, you can activate a two-page Control Panel popup via Shift-2 (page 1) and Shift-3 (page 2). The default size of these pages have been adjusted for 16:9 monitors. If the pages appear squashed you can temporarily drag their edges for better display. Alternatively, use Notepad to edit the panel.cfg, which allows pre-defined settings for 4:3 and 16:10 ratio screens to be used.

Page 1 has a payload and fuel manager (aircraft needs to be on ground with parking brakes set for it to work). Select Total Payload and Total Fuel options "EMPTY" to put the aircraft into a "cold and dark" state.

Page 2 is a table displaying all major settings and readouts including failure warnings and context-sensitive tips. **We suggest keeping page 2 open and monitoring the various readouts, warnings, and tips (hover the mouse pointer over the item in question for options) until you have become thoroughly familiar with the Do's and Don'ts of handling this plane.**

- (3) **Failure conditions.** The main failure conditions (which are partly dependent on FSX's Realism Settings) are battery depletion and engine failure, both of which can happen fairly quickly. The battery can be replenished by middle-clicking the battery item on page 2 of the Control panel, or by flipping the Ground Power switch on the overhead panel (FSXA only). Engine stress is signaled on page 2 of the Control Panel by a numeric counter decrementing from 100% to 0, with the final red zero flagging imminent failure. Engine stress can only be cured by reducing MAP and RPM to the acceptable 'green' ranges indicated on the respective gauges.
- (4) Control Panel settings and VC switches usually act on both left and right clicks, occasionally also middle clicks. Side windows, pilot's yoke, overhead spotlights, call sign, wipers, and pilot's clipboard are also clickable - click them and see what they do.
- (5) **Engine Start.** You can choose one of four startup procedures. (i) Ctrl-E will work in many situations (also reset some conditions), but it will not produce the realistic slow period-style engine start we all want. (ii) For a slow engine start, open page 2 of the Control Panel and

go through the eight steps detailed in the mini-tutorial engstart.jpg. (iii) Use the relevant switches of the Engine Start section on the VC's overhead panel (**mid-clicking** the starter button may be more helpful than keeping it depressed). (iv) Use the mini-icons accessible via Shift-7 in any view, including spot.

Note, proper engine start sequence is 2 - 1.

C-117D Engine Start Procedure

← Shift-3: open Cotrol Panel, page 2.

Flight: NAVY		17191	
batt	ext	amp	radio nav land pnl
24.0	0.0	30	24.0 OFF OFF OFF
door1 vac	wiper	static deice	p-ice stby1
CLSD OFF	OFF	OFF OFF	OFF OFF
#1	carb	mags	ger pump prime start
#2	OFF	OFF	0.0 ON OFF OFF
#1	tank	lbs	pph psi f/a mix
#2	LM	602	30 18 0.085 AR
#1	rpm	map	psi ch prop throt
#2	0	29.9"	0 38 100% 10%
psi	hand	tail	park left right flaps
0	OFF	FREE	100% DN DN UP
pitot	oat	ktas	kias alt vsi hdq
OFF	+15°	0	0 16 +0 313°
suc	aoa	pitch	trim target fpm lock
0.0	+0.0°	20°	+0.0° 0 +0 360°
17:27:11		-2-	

1 Battery 24V (mid-click to reset)

2 Mixture AUTO RICH (R-click on "mix" for AR; mid-click for manual)

3 Throttle CRACKED (10%)

4 Prop Control FULL FORWARD

5 Fuel Pump ON

6 Starter Button mid-click and count **NINE BLADES** (Hover mouse over "start" settings for tips and error tracking)

7 Mags / Ignition R-click until **BOTH**

8 Prime IF REQUIRED

Note
In case of "carb flooding" turn off pumps, open throttle a few seconds, close throttle, and redo steps 1-8. Alternatively, use Ctrl-E to recover.

- (6) In the VC, propeller control, throttle, and mixture levers can be linked by middle-clicking any one of them. To unlink, middle-click again.
- (7) Flip battery switch OFF and apply parking brakes to display wheel chocks and let the pilots take a break.
- (8) Cowl flaps open/close in intervals by clicking the "cht" (cylinder head temperature) item on the Control Panel or on pressing Shift-Ctrl-V / Shift-Ctrl-C. The recommended settings are listed in the checklist.
- (9) The angle of the landing lights cones on the runway can be changed by pressing Shift-Ctrl-Num8/Num2 respectively.

- (10) With engines off and parking brake set, the port passenger/freight door can be opened/closed by pressing Shift-E. The second freight door opens on Shift-E-2. Steps appear on Shift-E-3.
- (11) For detailed instructions on how to operate the Garmins consult the docs in subfolder "Documentation". When operating the Garmins, use left/right clicks on ON/OFF knob to decrease/increase the brightness of the display. Similarly, use left/right clicks to scroll through multiple pages. Generally, right=next and left=previous. For the NAV/GPS link switch click the CDI button on the Garmin.

CREDITS

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