



X-Plane 11

Columbia 400

Jackalope Bush Mod

Version 0.0.3

Jemma Studios, in conjunction with Josh McCreary, presents the Jackalope Experimental Bush Mod for the Columbia 400.

This experimental aircraft is perfect for law enforcement operations or executive charters anywhere in the backcountry. This aircraft can take off on a penny, and land on a dime, and nearly impossible to outrun by any other aircraft that could land in the same situations.

It is recommended that you also install our G1000 com panel fix for the Columbia 400 as well available at: <https://forums.x-plane.org/index.php?/files/file/62624-columbia-400-com-panel/>

Jemma Studios Enhancements:

- Removed wheel fairings and installed 22 x 8.5 Bush tires
- Installed steerable nose gear
- Installed HUD AOA indicator (with reverser indicator)
- Added reverser indicator to PFD
- 3 custom liveries
- Pressurized the cabin to 2.35 psi (rated to 21,000')
- Installed 1,417 liters of backup O2 (about 50 cf)
- Installed a few interior decorations
- Reinforced landing struts for backcountry operation



McCreary Performance Package: [NOTE: You must use the 'Experimental Flight Model' to gain maximum STOL effect!!]

- Installed prop reversers
- Boosted performance to 600hp
- Adjusted idle
- Installed "flaperons" (ailerons pitch down with flaps for slower stall speed)
- Increased elevator travel for improved pitch authority
- Installed oil and fuel pickups for inverted flight

BETA operation

The Jackalope Columbia 400 Bush Mod includes prop reversers, which allows for very short landings and/or high angle approaches (culminating in very short landings). You'll need to set a joystick and/or keyboard binding to REVERSE THRUST TOGGLE. (We recommend users with throttle quadrants to use the button activated when you pull the throttle lever down past idle.) This activates beta mode and you'll see a "REVERSER" light appear above the airspeed tape on the PFD and a red border appear in the HUD AOA indicator. You may then throttle forward to apply additional reverse thrust which brings the aircraft to an alarmingly fast stop.



HUD AOA operation

The Heads Up Display Angle of Attack Indicator functions pretty much on its own. If the aircraft is in normal cruise the display should be blank. The green line appears when the aircraft configuration is full flaps and max approach speed. Yellow arrows or chevrons suggest you should adjust pitch upward (and adjust throttle as necessary) until the full blue circle is shown which indicates full flaps and speed close to 1.3 Vs. If the red chevron or arrow appear you are approaching a stall. The red arrow appears at Vs so generally lights up when the stall horn activates.

LIVERIES

Bush: The bush livery is inspired by the gentlemen bush pilot that has been too busy flying to really clean the aircraft. It has a new prop and newly installed engine cowling (after an unfortunate taxi into dense shrubbery)



RCMP: This aircraft is used (not really) by the Royal Canadian Mounted Police for narcotic and smuggling surveillance in the mountains of British Columbia. When drug smugglers try to outrun them, the Mounties just laugh and yell, "F You, Eh!" (thus the tail number)

DEA: This narcotic surveillance and close pursuit aircraft is just awesome. The “DEA Columbia Jungle Ops” was a real patch, though admittedly it did not have a Columbia 400 silhouette.



SUMMARY

We hope you realize that, though possible to create in real life, this modification was created for the fun and joy of experimental flying in the backcountry and not based on anything done in reality (that we know of). Please let us know if you have any questions, comments or concerns by emailing jemmasimulations@gmail.com or join us on our discord <https://discord.gg/xpEnWXA>

Jemma Studios also accepts custom livery commissions. Be advised that we must own the aircraft or have access to a publicly available paint kit to accept commissions.

CREDITS

Josh McCreary for embracing this project and making a lot of wonderful performance modifications that make this aircraft ridiculously fun to fly.

Thanks to StevePHL for testing and pointing out the “floating nose gear” and “weather penetrating HUD”

Thanks to our other tester Milosanx for their positive input.

Remington 870 Pump Shotgun model by commander566 used under a Royalty Free License. Remington has not sponsored this X-Plane modification.

Some Jackalope mount components were obtained from CadNav.com and used under the Non-commercial license.

CHANGE LOG

- 0.0.3 Added comment regarding Experimental Flight Model and removed Specs section (was shown TBD)
- 0.0.2 Added link to com panel mod. Corrected HUD display ability to see through weather.
- 0.0.1 Correct floating nose wheel. Credit testers
- 0.0.0 Initial beta release