

Bell 206 v1.0

Add-On for Orbiter 2024



Credits:

Engine model, lua code: Thunder Chicken

Instrument elements: misha.physics

Buck Rogers

Martin Schweiger & Orbiter Forum members

REQUIREMENTS:

Activate "Enable absolute animation handling" in the Video/Advanced tab.

INSTALLATION

Extract all files in the orbiter2024 folder to the root of your Orbiter program directory, preserving the directory structure. This should NOT overwrite anything in the standard Orbiter package.

CONTROLS

E to toggle engine on/off

CTRL+NUMPAD +/- to throttle engine

NUMPAD 0/. to set collective

NUMPAD 1/3 to apply tailrotor torque

A to engage altitude hold (controls collective)

--K to engage level hold (not functional)

CTRL+L to toggle exterior lights

CTRL+(+/-) to change cabin light level

SHIFT+(+/-) to change instrument light level

I for help information

CONTENTS

2x Bell 206 Helicopters powered by Thunder Chicken's accurate engine and propeller models providing realistic performance simulation.

Cockpit still WIP but fully functional including animated flight sticks and low fuel indicator, to do: level autopilot and textures.

Bell 206 Ranger Helicopter

Technical Specifications

Crew: 1

Capacity: 4 passengers

Length: 38 ft 9.5 in (11.824 m) including rotors

Fuselage length: 31 ft 2 in (9.50 m)

Height: 9 ft 6.5 in (2.908 m)

Interior dimensions: 7 ft 2 in (2.18 m) length, by 4 ft 2 in (1.27 m) width, by 4 ft 3 in (1.30 m) height, plus 16 cu ft (453 L) baggage compartment

Empty weight: 1,455 lb (660 kg)

Max takeoff weight: 3,200 lb (1,451 kg)

Powerplant: 1 × Allison 250-C20 turboshaft engine, 400 hp (298 kW)

Main rotor diameter: 33 ft 4 in (10.16 m)

Main rotor area: 873 sq ft (81.1 m²)

Blade section: – NACA 0012 mod (11.3%)[78]

Performance

Maximum speed: 122 kn (140 mph, 226 km/h) at MTOW (sea level)

Maximum speed at 5,000 ft: 116 kn (133 mph; 215 km/h) at MTOW

Cruise speed: 120 kn (140 mph, 220 km/h) at MTOW, 5,000 feet

Range: 337 nmi (388 mi, 624 km) at MTOW, 5,000 feet, cruise speed, no reserves

Service ceiling: 20,000 ft (6,100 m) at MTOW

Rate of climb: 1,350 ft/min (6.9 m/s)

Disk loading: 4 lb/sq ft (20 kg/m²)

Power/mass: 0.09 hp/lb (0.15 kW/kg)

Bell 206 Jetranger II

Powerplant: 2 × Allison 250-C20 turboshaft engine, 400 hp (298 kW)

Empty Weight: 2747 Lb