

CHEYENNE IIIA

SPECIFICATIONS & PERFORMANCE

SPECIFICATIONS

POWER PLANTS

Two Pratt and Whitney (UACL) PT6A-61, flat rated at 720 shaft hp each

WEIGHTS

Maximum ramp weight	11,285 lbs. (5118 kg)
Maximum take-off weight	11,200 lbs. (5080 kg)
Maximum landing weight	10,330 lbs. (4686 kg)
Standard empty weight (includes: unusable fuel, full operating fluids and full oil)	6,837 lbs. (3101 kg)
Standard useful load	4,448 lbs. (2018 kg)
Maximum zero fuel weight (200 lbs in nacelles)	9,350 lbs. (4241 kg)

WING AREA/WING LOADING/POWER LOADING

Wing area	293 ft. ² (27.2m ²)
Wing loading	38.22 lbs./ft. ² (186.6 kg/m ²)
Power loading	7.78 lbs./hp (3.53 kg/hp)

PRESSURIZATION (6.3 PSI Differential)

Actual aircraft altitude	Cabin Altitude
14,600 ft. (4450 m)	Sea Level
28,500 ft. (8687 m)	8000 ft. (2438 m)
33,000 ft. (10,058 m)	10,000 ft. (3048 m)

USABLE FUEL (6.7 lbs./gal.)

560 U.S. gal. (2120 L)

OIL CAPACITY (Total)

6.5 U.S. gal. (24.6 L)

DIMENSIONS

Wing span	47.67 ft. (14.53 m)
Length	43.39 ft. (13.23 m)
Height	14.75 ft. (4.5 m)
Cabin length	275 in. (699 cm)
Cabin width	51 in. (130 cm)
Cabin height	52 in. (132 cm)
Passenger door size	29 x 46 in. (73.7 x 116.8 cm)
Nose baggage door size (forward)	24 x 20 in. (61.0 x 50.8 cm)
Utility door size (aft)	18.5 x 30 in. (47.0 x 76.2 cm)
Wing locker door size	24 x 34 in. (61.0 x 86.4 cm)

BAGGAGE – WEIGHT ALLOWANCE AND VOLUME

Rear baggage compartment	300 lbs. (31 ft. ³)	136 kg (.88 m ³)
Front baggage compartment	300 lbs. (16.25 ft. ³)	136 kg (.46 m ³)
Wing locker compartments	200 lbs. (11.2 ft. ³)	91 kg (.32 m ³)

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PERFORMANCE

11,200 lbs. gross weight

CRUISE SPEEDS – TAS

Mid-Cruise weight (9100 lbs.)

(Maximum cruise power)

22,000 ft. (6705 m) 305 kts. (565 kph)

25,000 ft. (7620 m) 302 kts. (559 kph)

31,000 ft. (9449 m) 293 kts. (543 kph)

35,000 ft. (10,668 m) 282 kts. (522 kph)

CRUISE RANGE (560 gal. usable)

Maximum cruise power

22,000 ft. (6705 m) 1372 nm (2541 km)

25,000 ft. (7620 m) 1510 nm (2797 km)

31,000 ft. (9449 m) 1840 nm (3408 km)

35,000 ft. (10,668 m) 2055 nm (3806 km)

Long range power

22,000 ft. (6705 m) 1803 nm (3339 km)

25,000 ft. (7620 m) 1945 nm (3602 km)

31,000 ft. (9449 m) 2170 nm (4019 km)

35,000 ft. (10,668 m) 2270 nm (4204 km)

Range includes allowance for fuel used during starting, taxi, take-off, climb, cruise, descent and a 45 minute reserve at maximum range power and standard atmospheric conditions.

RATE OF CLIMB AT SEA LEVEL

(Two engines)

11,200 lbs. (5080 kg) 2380 fpm (725 m/m)

9,000 lbs. (4082 kg) 3220 fpm (981 m/m)

(One engine)

11,200 lbs. (5080 kg) 625 fpm (191 m/m)

9,000 lbs. (4082 kg) 1075 fpm (328 m/m)

SERVICE CEILING

(Two engines – 100 fpm)

11,200 lbs. (5080 kg) 35,840 ft. (10,924 m)

(One engine – 50 fpm)

11,200 lbs. (5080 kg) 21,200 ft. (6462 m)

9,000 lbs. (4082 kg) 1075 fpm (328 m/m)

STALL SPEEDS IAS –

Power idle at 11,200 lbs. (5080 kg)

Flaps 30° gear down 89 kts. (165 kph)

Flaps 0° gear up 102 kts. (189 kph)

TAKE-OFF DISTANCE (w/Autofeather) Flaps 10°

Normal procedures at 11,200 lbs. (5080 kg)

Lift-off speed (IAS) 95 kts. (176 kph)

Ground run 1465 ft. (447 m)

Tot. dis. over 50 ft. obstacle 2280 ft. (695 m)

LANDING DISTANCE

Without propeller reversing

Approach speed (IAS) 109 kts. (202 kph)

Ground roll 1914 ft. (583 m)

Tot. dis. over 50 ft. obstacle 3043 ft. (928 m)

With propeller reversing

Approach speed (IAS) 109 kts (202 kph)

Ground roll 1457 ft. (444 m)

Tot. dis. over 50 ft. obstacle 2586 ft. (788 m)

DISTANCE TO ACCELERATE AND STOP - 11,200 lbs. (5080 kg) Flaps 0°

(With Autofeather and Reverse)

(includes allowance for failure recog. & reaction)

Decision speed (IAS) 95 kts. (176 kph)

Total distance 3363 ft. (1025 m)

MISSION PROFILE

Operation based on the following conditions:

Empty weight 6837 lbs. (3101 kg)

Ramp weight 11,285 lbs. (5119 kg)

Take-Off weight 11,200 lbs. (5080 kg)

Maximum cruise power at 35,000 ft. (10,668 m)

8 occupants, plus 160 lbs. (73 kg) luggage, and
2928 lbs. (1328 kg) of fuel before starting engines

Range 1519 nm (2813 km)

Speed (Average) 278 kts. (515 kph)

Mission Time 5 hrs., 42 min.