

CHEYENNE IA

SPECIFICATIONS & PERFORMANCE

SPECIFICATIONS

POWER PLANTS

Two Pratt and Whitney (UACL) PT6A-11
rated at 500 shaft hp each

WEIGHTS

Maximum ramp weight	8,750 lbs. (3969 kg)
Maximum take-off weight	8,700 lbs. (3946 kg)
Maximum landing weight	8,700 lbs. (3946 kg)
Standard empty weight	5,110 lbs. (2318 kg)
(includes: unusable fuel, full operating fluids and full oil)	
Standard useful load	3,640 lbs. (1651 kg)
Maximum zero fuel gross weight	7,200 lbs. (3266 kg)

WING AREA/WING LOADING/POWER LOADING

Wing area	229 ft. ² (21.3m ²)
Wing loading	38.0 lbs./ft. ² (186 kg/m ²)
Power loading	8.7 lbs./hp (3.9 kg/hp)

PRESSURIZATION (5.5 PSI Differential)

Actual aircraft altitude	Cabin Altitude
12,000 ft. (3658 m)	Sea Level
25,000 ft. (7620 m)	8,000 ft. (2438 m)
29,000 ft. (8839 m)	10,000 ft. (3048 m)

USABLE FUEL (6.7 lbs./gal.)

Standard 366 U.S. gal. (1385 L)

OIL CAPACITY (Total)

6.5 U.S. gal. (24.6 L)

DIMENSIONS

Wing span	42.67 ft. (13.0 m)
Length	34.67 ft. (10.57 m)
Height	12.75 ft. (3.89 m)
Cabin length	106.5 in. (270.5 cm)
Cabin width	50 in. (127 cm)
Cabin height	51.5 in. (131 cm)
Passenger door size	28 x 46 in. (71.1 x 116.8 cm)
Baggage door size (forward)	26 x 21 in. (66 x 53.3 cm)

BAGGAGE – WEIGHT ALLOWANCE AND VOLUME

Rear baggage compartment	200 lbs. (22 ft. ³)	90.7 kg (.62 m ³)
Front baggage compartment	300 lbs. (20 ft. ³)	136 kg (.56 m ³)
Cargo area total	(150 ft. ³)	(4.25 m ³)

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PERFORMANCE

CRUISE SPEEDS – TAS

Average cruise weight

(Maximum cruise power @ 7,500 lbs.)

12,000 ft. (3658 m) 255 kts. (473 kmh)

16,000 ft. (4877 m) 261 kts. (484 kmh)

20,000 ft. (6096 m) 257 kts. (476 kmh)

25,000 ft. (7620 m) 247 kts. (458 kmh)

CRUISE RANGE

Standard Fuel (366 gal. usable)

Maximum cruise power

12,000 ft. (3658 m) 955 nm (1769 km)

16,000 ft. (4877 m) 1010 nm (1871 km)

20,000 ft. (6096 m) 1090 nm (2019 km)

25,000 ft. (7620 m) 1205 nm (2232 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)

8,700 lbs. (3946 kg) 1750 fpm (533 m/m)

7,000 lbs. (3175 kg) 2390 fpm (728 m/m)

(One engine)

8,700 lbs. (3946 kg) 440 fpm (134 m/m)

7,000 lbs. (3175 kg) 760 fpm (232 m/m)

SERVICE CEILING

(Two engines – 100 fpm)

8,700 lbs. (3946 kg) 28,200 ft. (8595 m)

7,000 lbs. (3175 kg) 29,000 ft. (8839 m)

(One engine – 50 fpm)

8,700 lbs. (3946 kg) 13,750 ft. (4191 m)

7,000 lbs. (3175 kg) 19,959 ft. (6081 m)

STALL SPEEDS IAS –

Power idle at 8,700 lbs. (3946 kg)

Flaps 40° gear down 72 kts. (133 kmh)

Flaps 0° gear up 84 kts. (156 kmh)

TAKE-OFF DISTANCE Flaps 15°

Normal procedures at 8,700 lbs. (3946 kg)

Lift-off speed (IAS) 88 kts. (163 kmh)

Ground run 1350 ft. (411 m)

Tot. dis. over 50 ft. obstacle 1,900 ft. (579 m)

LANDING DISTANCE–8,700 lbs. (3946 kg)

3° Approach angle without reversing

Approach speed (IAS) 102 kts. (189 kmh)

Ground roll 1,600 ft. (488 m)

Tot. dis. over 50 ft. obstacle 2,550 ft. (777 m)

With propeller reversing

Approach speed (IAS) 102 kts. (189 kmh)

Ground roll 920 ft. (280 m)

Tot. dis. over 50 ft. obstacle 1,630 ft. (497 m)

DISTANCE TO ACCELERATE AND STOP - 8,700 lbs. (3946 kg) Flaps 0°

(includes allowance for failure recog. & reaction)

Decision speed (IAS) 90 kts. (167 kmh)

Total distance 3,580 ft. (1091 m)

MISSION PROFILE

Operation based on the following conditions:

Empty weight 5,360 lbs. (2431 kg)

Ramp weight 8,750 lbs. (3969 kg)

Take-Off weight 8,700 lbs. (3946 kg)

Maximum cruise power at 25,000 ft. (7620 m)

5 occupants, plus 208 lbs. (94 kg) luggage, and 2452 lbs. (1112 kg) of fuel before starting engines

Range 1220 nm (2259 km)

Speed (Average) 232 kts. (430 kmh)

Mission Time 5 hrs., 15 min.