

1982 CHEYENNE I

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 (includes: unusable fuel, full operating fluids and full oil)	4,910 lbs. (2227 kg)
Standard useful load	3,840 lbs. (1742 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	300 U.S. gal. (1188 L)
Optional	382 U.S. gal. (1446 L)

OIL CAPACITY (Total)

6.5 U.S. gal. (24.6 L)

DIMENSIONS

Wing span	40.67 ft. (12.4 m)
Length	34.67 ft. (10.57 m)
Height	12.75 ft. (3.89 m)
Cabin length	101 in. (256 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) 249 kts. (461 kmh)

16,000 ft. (4877 m) 248 kts. (460 kmh)

20,000 ft. (6096 m) 244 kts. (452 kmh)

25,000 ft. (7620 m) 236 kts. (437 kmh)

CRUISE RANGE

Standard Fuel (300 gal. usable)

Maximum cruise power

12,000 ft. (3658 m) 715 nm (1325 km)

16,000 ft. (4877 m) 780 nm (1445 km)

20,000 ft. (6096 m) 850 nm (1575 km)

25,000 ft. (7620 m) 940 nm (1742 km)

Long range power

12,000 ft. (3658 m) 775 nm (1436 km)

16,000 ft. (4877 m) 845 nm (1566 km)

20,000 ft. (6096 m) 910 nm (1686 km)

25,000 ft. (7620 m) 980 nm (1816 km)

OPTIONAL FUEL (382 gal. usable)

Maximum cruise power

12,000 ft. (3658 m) 945 nm (1750 km)

16,000 ft. (4877 m) 1040 nm (1927 km)

20,000 ft. (6096 m) 1130 nm (2094 km)

25,000 ft. (7620 m) 1260 nm (2335 km)

Long range power

12,000 ft. (3658 m) 1040 nm (1927 km)

16,000 ft. (4877 m) 1135 nm (2103 km)

20,000 ft. (6096 m) 1220 nm (2261 km)

25,000 ft. (7620 m) 1330 nm (2464 km)

Range includes allowance for fuel used during starting, taxi, takeoff, climb, cruise, descent and a 45 minute reserve at long 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)

Without optional tip tanks

8,700 lbs. (3946 kg) 413 fpm (126 m/m)

7,000 lbs. (3175 kg) 755 fpm (230 m/m)

With optional tip tanks

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)

SERVICE CEILING

(One engine – 50 fpm)

Without optional tip tanks

8,700 lbs. (3946 kg) 12,500 ft. (3810 m)

7,000 lbs. (3175 kg) 18,700 ft. (5700 m)

With optional tip tanks

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

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

STALL SPEED IAS

Power Idle at 8700 lbs. (3946 kg)

Flaps 40° gear down 72 kts. (133 kmh)

Flaps 0° gear up 84 kts. (156 kmh)

TAKEOFF DISTANCE (FAA Approved)

Flaps 15°

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

Lift-off speed (IAS) 89 kts.

Ground run 1,429 ft.

Total distance over 50 ft. obstacle 2,444 ft.

LANDING DISTANCE (FAA Approved)

3° Approach angle without reserving

8,700 lbs. (3946 kg)

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

Ground roll 1,589 ft. (484 m)

Tot. dist. over 50 ft. obstacle 2,263 ft. (690 m)

With propeller reversing

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

Ground roll 921 ft. (281 m)

Tot. dist. over 50 ft. obstacle 1,663 ft. (507 m)

DISTANCE TO ACCELERATE AND STOP - 8700 lbs. (3946 kg) Flaps 15°

(includes allowance for failure recog. & reaction)

Decision speed (IAS) 89 kts.

Total distance 3,334 ft.

MISSION PROFILE

Operation based on the following conditions:

Equipped weight 5,360 lbs. (2431 kg)

Ramp weight 8,750 lbs. (3969 kg)

Takeoff weight 8,700 lbs. (3946 kg)

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

5 occupants, plus 178 lbs. (807 kg) luggage, and 2362 lbs. (1071 kg) of fuel before starting engines

Range 1109 nm (2055 km)

Speed (average) 224 kts. (415 kmh)

Mission time 4 hrs., 57 min.