

MODEL COMPARISONS		MODEL	
		CH-47B	CH-47D
Weight Empty	(lb)	19,676	23,149
Fixed Useful Load	(lb)	1,382	1,003
Design Gross Weight	(lb)	33,000	33,000
Maximum Gross Weight	(lb)	40,000	50,000
Rotor Speed	(rpm)	225/230	225
Usable Fuel Capacity	(lb)	3,666	6,695
Performance (33,000 lb/Std Atmos)			
Max Cruise Speed (Sea Level)	(kn)	155	160
Max Rate of Climb (Sea Level) (30 Min)	(fpm)	2,080	3,130
Hover-Out-of-Ground-Effect Ceiling (10 Min)	(ft)	10,100	16,940
Service Ceiling (1 Engine Inoperative) (30-Min Rating)	(ft)	—	13,100
Mission Capability (30-NMI Radius)			
● External-Payload Mission* SL/59°F			
Takeoff Gross Weight	(lb)	39,450	50,000
Total Mission Fuel	(lb)	2,545	2,799
Cruise Speed			
Outbound	(kn)	100	128
Inbound	(kn)	132	136
Payload	(lb)	15,847	23,049
● External-Payload Mission* 2,000 ft/70°F			
Takeoff Gross Weight	(lb)	38,200	50,000
Total Mission Fuel	(lb)	2,464	2,712
Cruise Speed			
Outbound	(kn)	100	114
Inbound	(kn)	140	137
Payload	(lb)	14,698	23,136
● External-Payload Mission* 4,000 ft/95°F			
Takeoff Gross Weight	(lb)	32,500	42,280
Total Mission Fuel	(lb)	2,222	2,516
Cruise Speed			
Outbound	(kn)	100	106
Inbound	(kn)	144	138
Payload	(lb)	9,220	15,612

* External-payload mission takeoff gross weight based on hover out of ground effect with 200-fpm vertical rate of climb and external load attached. Mission radius is 300 nmi with payload outbound only and 30-minute fuel reserve.

PHYSICAL CHARACTERISTICS

	CH-47B	CH-47D
Cabin dimensions (internal)		
All models: length = 366 inches; width = 90 inches; height = 78 inches		
Usable fuel capacity (U.S. gallons)	564	1,030
Xmsn rating (shaft horsepower)	4,970	7,500
Engine model (AVCO Lycoming)	T55-L-7C	T55-L-712
Ratings (shp, uninstalled, sl/std)		
Max continuous	2,400	3,000
Intermediate (30 min)	2,650	3,400
Takeoff (10 min)	2,850	3,750
Emergency		4,500
External cargo load capacity (lb)		
Forward		17,000
Aft		17,000
Center	20,000	26,000
Forward and aft dual-point load		25,000

AVIONICS EQUIPMENT

Doppler – ASN-128A
 Radar altimeter – APN-209A(V)
 AIMS altimeter – AAU-31A/32A
 VOR/ILS – ARN-123(V)
 ADF – ARN-89B
 HSI/RMI – ID 2103/A
 Altitude indicator – ARU-12A

Magnetic compass – ASN-43
 IFF – APX-100(V)1
 Intercom – C-6533
 UHF-AM – ARC-164
 VHF AM/FM – ARC-186 (dual)
 Secure speech – KY-28/58
 HF – SSB – ARC-102

AIRCRAFT SURVIVABILITY EQUIPMENT

Radar warning – APR-39VI
 Missile detector – ALQ-156
 Flare dispenser – M-130
 Crash-resistant fuel system