

Weight & Balance estimate based on airplane data in FAA airworthiness file (note: predates the aux fuel tank installation):

Empty weight 1397 lbs.

Empty moment 37.5 inches

Useful load 853 lbs.

Item	Weight	Moment/1000 (pound inches)
a/c	1397	37.5
Oil (8 qts)	15	-0.3
Front pax 180 lbs. L, 210 lbs. R	390	12.2
Wing fuel 36 gal full, -4 gal for Williston to CDK = 32gal x 6 lbs. = 192lbs.	192	6.5
Rear pax + bags 160 lbs. + 25 lbs.	185	23.8
Aux fuel in baggage area 18 gal x 6 lbs. = 108 lbs. 4 qts oil in bag area = +7 lbs. Estimated tank +12 lbs.	108+7+12	10.9
Totals	2307	90.6

The Police chief estimated all 3 occupants were each 20 lbs. heavier than the weights they provided. This estimate uses the weights as provided.

The 18-gallon Auxiliary fuel tank was assumed to weight 12 lbs. empty, as the Supplemental Type Certificate information (FAA Airworthiness file) indicates that when full, the tank it is within baggage area weight limitation of limits of 120 lbs. This estimate does not include the tow bar and other materials located in baggage area.

Max gross weight per owner's manual = 2250 lbs.

1 9 6 2
CESSNA
172_C SKY HAWK



**OWNER'S
MANUAL**

PERFORMANCE and SPECIFICATIONS

	MODEL 172	SKYHAWK	FLOAT- PLANE
GROSS WEIGHT	2250 lbs	2250 lbs	2220 lbs
SPEED:			
Top Speed at Sea Level	139 mph	140 mph	104 mph
Cruise,	131 mph	132 mph	102 mph
75% Power at 7000 ft., Landplane			
75% Power at 6500 ft., Floatplane			
RANGE:			
Cruise,	495 mi	500 mi	390 mi
75% Power at 7000 ft., Landplane	3.8 hr	3.8 hr	3.8 hr
75% Power at 6500 ft., Floatplane	131 mph	132 mph	102 mph
36 Gallons, No Reserve			
Optimum Range at 10,000 ft.	720 mi	720 mi	505 mi
36 Gallons, No Reserve	7.2 hr	7.2 hr	7.4 hr
	100 mph	100 mph	69 mph
RATE OF CLIMB AT SEA LEVEL	700 fpm	700 fpm	550 fpm
SERVICE CEILING	14,550 ft	14,550 ft	11,150 ft
TAKE-OFF:			
Take-Off Run	825 ft	825 ft	1620 ft
Total Distance Over 50-ft Obstacle	1430 ft	1430 ft	2390 ft
LANDING:			
Landing Run	690 ft	690 ft	590 ft
Total Distance Over 50-ft Obstacle	1140 ft	1140 ft	1345 ft
EMPTY WEIGHT (Approximate)	1260 lbs	1330 lbs	1410 lbs
BAGGAGE	120 lbs	120 lbs	120 lbs
WING LOADING: Pounds/Sq Foot	12.9 lbs	12.9 lbs	12.8 lbs
POWER LOADING: Pounds/HP	15.5	15.5 lbs	15.3 lbs
FUEL CAPACITY: Total	39 gal.	39 gal.	39 gal.
OIL CAPACITY: Total	8 qts	8 qts	8 qts
PROPELLER: Fixed Pitch, Dia.	76 inches	76 inches	80 inches
POWER:			
Continental Engine	O-300-C	O-300-D	
145 rated HP at 2700 RPM			
O-300-C	Equipped with mechanically engaged starter.		
O-300-D	Equipped with all electric push-button starter; vacuum pump provisions on accessory case.		

Operating Limitations

