



Cessna 172

Weight & Balance

	Weight	×	Arm	=	Moment
Basic Empty Weight					
Front Pilots	+			+	
Rear Passengers	+			+	
Baggage 120lbs. max	+			+	
Zero Fuel Weight	=		CG	=	
Usable Fuel	+			+	
Ramp Weight	=			=	
Taxi Fuel	-			-	
Takeoff Weight	=		CG	=	
Fuel Burn	-			-	
Landing Weight	=		CG	=	

V1 Flight Aircraft Weight & Balance Info

Important information specific to each N-number, including basic empty weight and moment, is located in the approved POH/AFM and the current V1 Flight aircraft records.

Use the current weight and balance data for the aircraft you are flying.

Formulas

- $\text{Weight} \times \text{Arm} = \text{Moment}$
- $\text{Total Moment} \div \text{Total Weight} = \text{Center of Gravity (CG)}$
- $\text{Max Ramp Weight} - \text{Zero Fuel Weight} = \text{Usable Fuel Weight}$
- $\text{Fuel Weight} \div 6 = \text{Fuel Gallons}$
- 100 LL (Blue) Fuel Weighs 6 lbs./gal.
- Oil Weighs 7.5 lbs./gal.

Performance

Density Altitude	
Dep. Apt.	Dest. Apt.
Maneuvering Speed	
Takeoff	Landing

Piper Archer

Weight & Balance

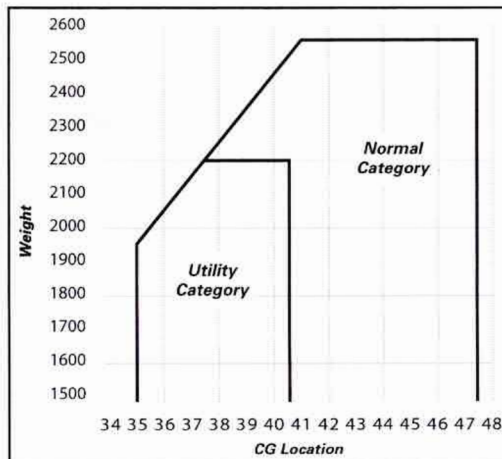
	Weight	×	Arm	=	Moment
Basic Empty Weight					
Front Pilots	+		80.50	+	
Rear Passengers	+		118.10	+	
Baggage 200lbs. max	+		142.80	+	
Zero Fuel Weight	=		CG	=	
Usable Fuel	+		95.00	+	
Ramp Weight	=			=	
Taxi Fuel	-	8	95.00	-	760
Takeoff Weight	=		CG	=	
Fuel Burn	-		95.00	-	
Landing Weight	=		CG	=	

Performance

Short Field
Takeoff Distance
Ground Roll 50ft Obst.

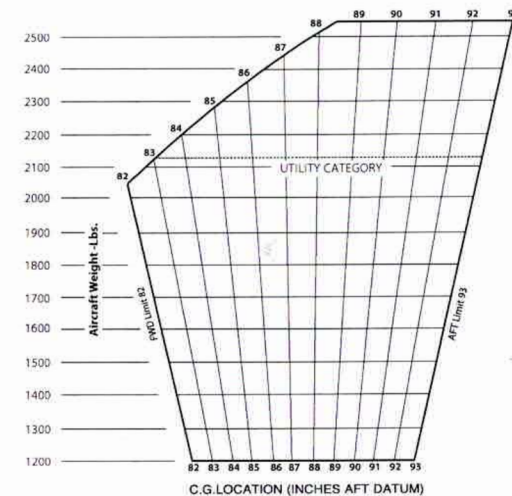
Short Field
Landing Distance
Ground Roll 50ft Obst.

Cessna 172S



CG Envelopes designed for 172B and S Models for training purposes only. Other 172 models are not depicted. CG envelopes shown are training references and may not depict every aircraft model. Always use the approved POH/AFM and current aircraft records for the airplane being flown. This worksheet is a planning aid and does not replace FAA-approved publications or procedures.

Archer



Performance

Takeoff
Performance
Flaps Up Flaps 25°

Engine Performance:

Glide Range:

Landing
Performance
Dep. APT Dest. APT

AIRWORTHINESS CHECKLIST



Completed By: _____ Date: _____ N-Number: _____

Documents

- ✈ ☐ Airworthiness Certificate (91.203(a)(1))
- ✈ ☐ Registration Certificate (91.203(a)(2)) Expiration Date: _____
- N/A ☐ Radio Station License (47 CFR 87.18) - if flying outside US
- ✈ ☐ Operating Handbook (91.9(b))
- ✈ ☐ Weight & Balance (23.2620) (official - in POH/AFM)
- ✈ ☐ External Data Plate (45.11)
- ✈ ☐ Compass Deviation Card (not required in G1000 Archers and Seminoles)

Offset

- ☐ Total AC Time at Next 100-hr: _____
- ☐ (-) 100 Hr Due Off/On _____
- ☐ (=) Offset: _____

Verify this figure matches the Offset listed on the Aircraft Quick Reference page.

Inspections

- ☐ Annual (91.409(a)) - 12 calendar months
Most Recent: _____ Next Due: _____
- ☐ VOR equipment check (91.171) - 30 days (if using VOR for IFR flight)
Most Recent: _____ Days Ago
- ☐ 100-hour (91.409(b)) - 100 flight hours less previous overflight
Total AC Time at next due (from MX summary): _____
(-) Offset (taken from above section): _____
(=) Off/On Hours: _____
(-) Current Off/On Hours: _____
(=) Hours left to 100-hour: _____
- ☐ Altimeter / Static / Encoder (91.411) - 24 calendar months (for IFR flight)
Most Recent: _____ Next Due: _____
- ☐ Transponder (91.413) - 24 calendar months (if using transponder)
Most Recent: _____ Next Due: _____
- ☐ ELT (91.207)
Battery replacement - 1 hr use or 50% life
Next Due: _____
Inspection - 12 calendar months
Most Recent: _____ Next Due: _____

"Airworthy" means an aircraft and component parts meet its type design (or properly altered configuration) and is in a condition for safe operation. (Ref: FAR 21.31, FAR 21.41, FAR 21.183)

Airworthiness Directives (Part 39)

- ☐ Applicable ADs and compliance listed in FAA Airworthiness Directives Compliance Record sheets (available on Aircraft Quick Reference page)
Recent compliance actions in maintenance logs
- ☐ To verify recurring AD currency (if required):

AD #	Next Due Total	(-) Offset	(=) Next Due Off/On
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

If AD next-due time is specified as an engine or prop time (rather than Total AC Time), recalculate offset using engine or prop time vs. Off/On time at the most recent 100-hr, then apply that offset to next-due time to find Off/On hours at next due.

Form 337s (Part 43 Appendix B)

- ☐ Review Aircraft Quick Reference page for any 337s present

Inoperative Equipment (91.213(d))

- ✈ List inoperative equipment: _____

If any inop equipment present, verify:

- ✈ ☐ Not required by
- ✈ ☐ 91.205(b) (day VFR), (c) (night VFR) and/or (d) (IFR)
- ✈ ☐ Equipment list in POH/AFM
- ✈ ☐ Airworthiness directive
- ✈ ☐ Deactivated and placarded "Inoperative", OR...
- ✈ ☐ Removed, control placarded, and maintenance recorded
- ✈ ☐ PIC determines that inop equipment is not a hazard to the aircraft