

Fuel Capacity



FOLD HERE

Fuel Capacity

Total: _____ gal Usable: _____ gal

TIP:

Some airplanes have long range and/or tip tanks – make sure you use the correct “usable” fuel amounts for your endurance calculations.

Fuel System



FOLD HERE

Fuel System

Gravity Fed *or* Pump Driven?
Fuel-Injected *or* Carbureted?

Fuel Grade and Weight



FOLD HERE

Fuel Grade and Weight

Grade: _____

Weight: _____ lbs./gal



Fuel Drains and Locations



FOLD HERE

Fuel Drains and Locations

Number of Drains: _____

Locations: _____



Oil Quantity

(Max./Min./Type)



FOLD HERE

Oil Quantity

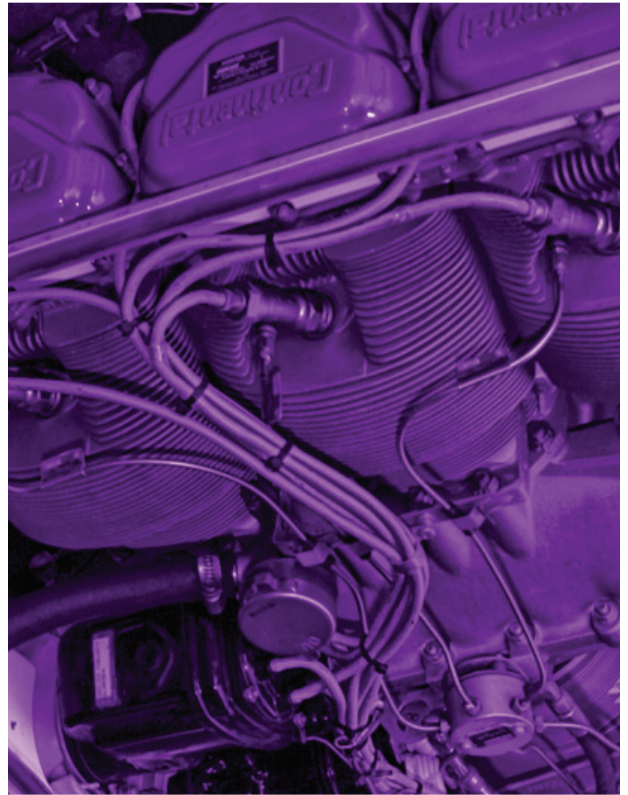
Minimum: _____

Maximum: _____

Type: _____

(Make, Model, HP, rpm)

Engine Specs.



FOLD HERE

Engine Specifications

Make: _____ Model: _____

Horsepower: _____ Max rpm: _____

TIP:

Engine model numbers can tell you a lot. For example, a C172R has a Lycoming IO-360-L2A engine. The “I” means fuel injected and the “O” means the cylinders are horizontally opposed. The “360” refers to cubic inches of displacement, describing the physical size of the engine.



Electrical System Specs.



FOLD HERE

Electrical System Specifications

Alternator Voltage: _____ Battery Voltage: _____

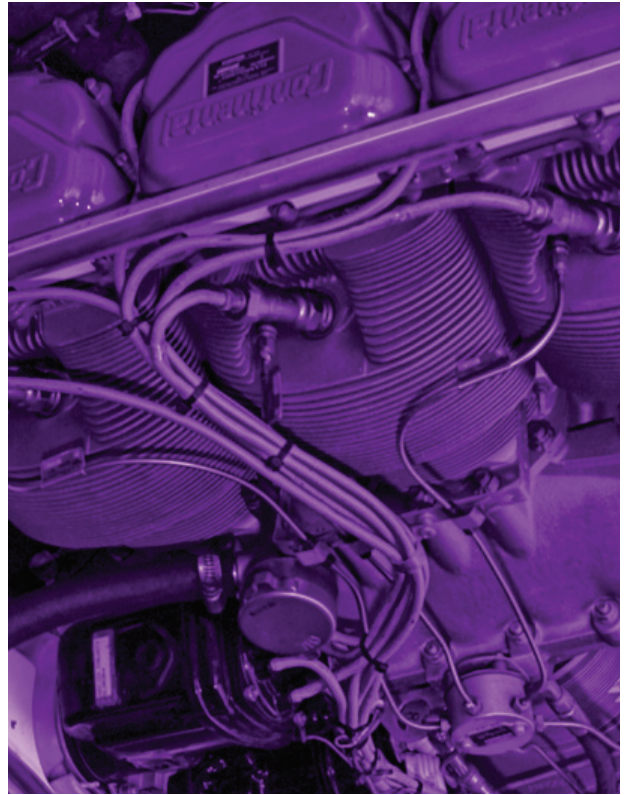
Alternator Amperage: _____

Abnormal Indications and Warnings:

TIP:

Electrical component amperage is listed on the face of the circuit breakers. Turning OFF the components with the largest draw will lengthen the life of the battery during an alternator failure.

Magneto Check



FOLD HERE

Magneto Check

Runup rpm: _____ Max. rpm Drop: _____

Max. Difference Between
Left and Right _____

TIP:

Question on how magnetos work? Check out the AOPA Air Safety Foundation's *Engine and Propeller* online course at www.asf.org/courses.



Nosewheel Steering



FOLD HERE

Nosewheel Steering

Steerable through _____ degrees?

or

Free Castering?

TIP:

This is of primary importance when maneuvering the aircraft on the ground with a tug. Look for markings on the nosewheel strut, wheel pant, or cowling that indicate the steering limit. This does not apply if the nosewheel is free castering.

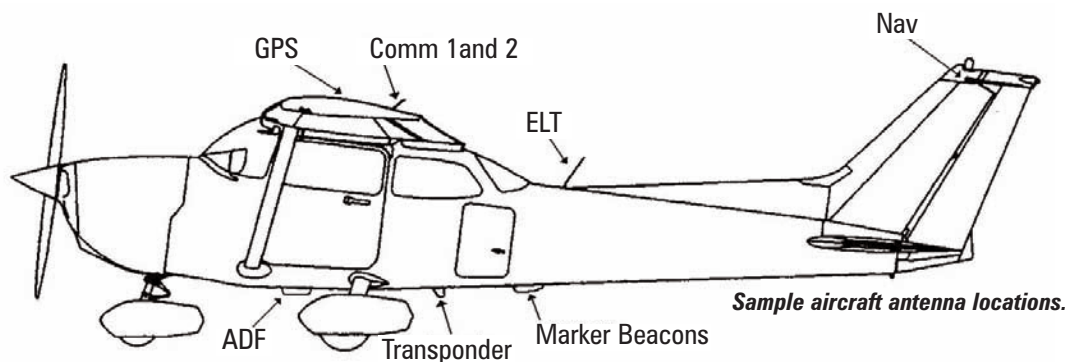


Antenna Locations



FOLD HERE

Antenna Locations

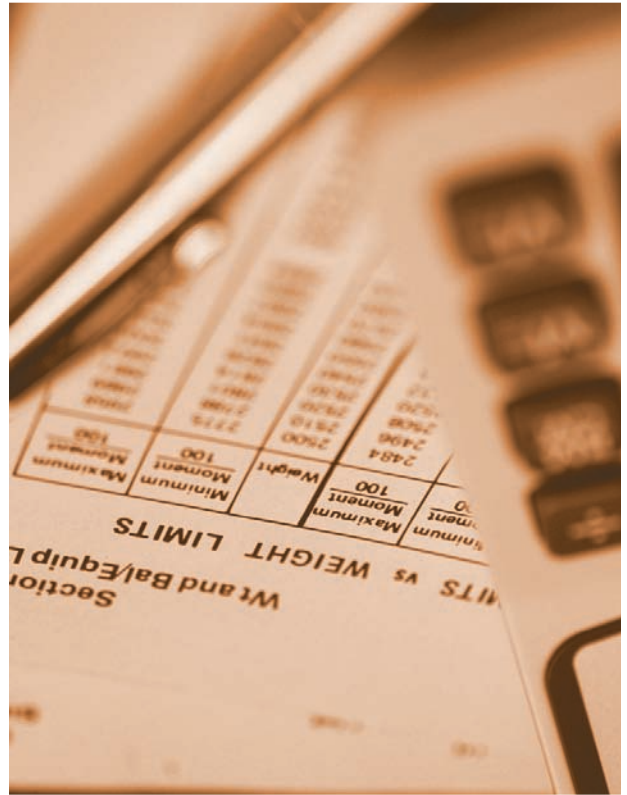


TIP:

Aircraft antenna locations vary based on the equipment installed.



Maximum Ramp Weight



FOLD HERE

Maximum Ramp Weight

_____ lbs.

TIP:

Maximum ramp weight usually includes the weight of fuel needed to taxi and complete the runup. This is why the maximum ramp weight may exceed the maximum takeoff weight in the normal category.

V_{NE}



FOLD HERE

V_{NE} - Never Exceed Speed

TIP:

V_{NE} is denoted by the red radial line



ON Δ



FOLD HERE

V_{NO} - Maximum Structural Cruising Speed

TIP:

V_{NO} is shown where the green and yellow arcs meet. It should not be exceeded except in smooth air.



V_A



FOLD HERE

V_A - Maneuvering Speed

Min. Gross Weight: _____

Max. Gross Weight: _____

TIP:

V_A is the maximum speed at which you may apply full control deflections without overstressing the airplane. It varies with weight.





FOLD HERE

V_Y - Best Rate of Climb

TIP:

V_Y delivers the greatest altitude gain over a given period of **time**.



V_x \wedge



FOLD HERE

V_x - Best Angle of Climb

TIP:

V_x delivers the greatest altitude gain over a given **distance**.



V_R



FOLD HERE

V_R - Rotation Speed

_____ KIAS *or* mph

TIP:

This is *not* marked on the airspeed indicator and will change depending on the takeoff procedure (e.g., normal or soft-field takeoff).



V_{FE}



FOLD HERE

V_{FE} - Maximum Flap Extension Speed

Increment

Speed

_____	_____
_____	_____
_____	_____
_____	_____



TIP:

Flap operating range is shown on the airspeed indicator by the white arc. Often, the first flap extension speed is not included in the white arc.

SA



FOLD HERE

Vs - Stall Speed – Clean

_____ 0° Bank
_____ 60° Bank

TIP:

Vs, sometimes known as Vs1, is shown on the bottom of the green arc.

Remember: Vs1 = “Stuff In,” which means gear and flaps retracted.



OS 



FOLD HERE

V_{so} - Stall Speed – Landing Configuration

_____ 0° Bank
_____ 60° Bank

TIP:

V_{so} is shown on the bottom of the white arc.

Remember: V_{so} = “Stuff Out,” which means gear and flaps extended.



Normal Takeoff Procedures



FOLD HERE

Normal Takeoff Procedures

Flap Setting: _____

Rotation Speed: _____

Climb Speed: _____



Normal Landing Procedures



FOLD HERE

Normal Landing Procedures

Leg	Power Setting	Flap Setting	Airspeed
Crosswind:	_____	_____	_____
Downwind:	_____	_____	_____
Base:	_____	_____	_____
Final:	_____	_____	_____

TIP:

Memorizing proper power settings and airspeeds for each segment of the approach will help stabilize the approach and landing. Remember that flap settings can vary with changes in aircraft weight and wind conditions.



Short-Field Takeoff Procedures



FOLD HERE

Short-Field Takeoff Procedures

Flap Setting: _____

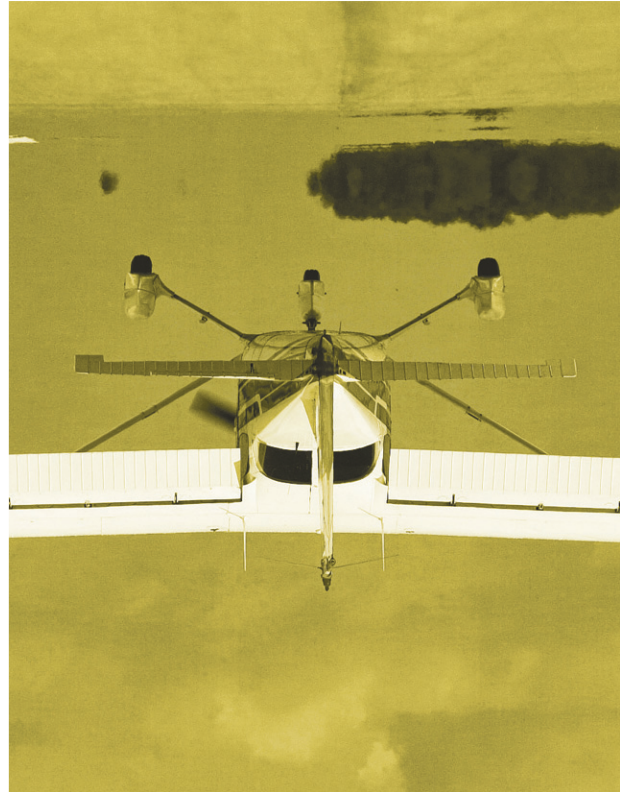
Rotation Speed: _____

Climb Speed: _____

Flap Retraction: _____



Short-Field Landing Procedures



FOLD HERE

Short-Field Landing Procedures

Leg	Power Setting	Flap Setting	Airspeed
Crosswind:	_____	_____	_____
Downwind:	_____	_____	_____
Base:	_____	_____	_____
Final:	_____	_____	_____

TIP:

The objective of a short-field landing is to transfer the aircraft's weight from the wings to wheels as soon as possible. Touchdown as slowly as possible, while simultaneously retracting the flaps and applying maximum braking.



Soft-Field Takeoff Procedures



FOLD HERE

Soft-Field Takeoff Procedures

Climb Speed: _____ KIAS *or* mph

Flap Setting: _____

Flap Retraction: _____ KIAS *or* mph (*or* altitude)

TIP:

Don't forget these soft-field takeoff techniques: Hold full aft elevator while taxiing into position and avoid unnecessary stopping or braking. After rotation, remember to fly in ground effect. In many light general aviation aircraft you may need to push forward on the yoke to stay in ground effect while building up airspeed.



Soft-Field Landing Procedures



FOLD HERE

Soft-Field Landing Procedures

Leg	Power Setting	Flap Setting	Airspeed
Crosswind:	_____	_____	_____
Downwind:	_____	_____	_____
Base:	_____	_____	_____
Final:	_____	_____	_____

TIP:

The objective of a soft-field landing is to have the wings support the aircraft's weight as long as possible, which helps minimize the chance of sinking in the soft soil. Touchdown as slowly as possible, hold the nosewheel off the ground, and avoid unnecessary braking. You may need to add power in the flare to avoid a hard landing.



Maximum Demonstrated Crosswind Component



FOLD HERE

Max. Demonstrated Crosswind Component

TIP:

This is the maximum crosswind in which the aircraft was tested during certification. Although it is not *technically* a limitation, it should be treated as one.

Best Glide Speed



FOLD HERE

Best Glide Speed

_____ Flaps Up

_____ Flaps Down

TIP:

This speed varies with weight and flap settings.



Types of Operations



FOLD HERE

Types of Operations

Night **Yes** or **No**

IFR **Yes** or **No**

Known Icing **Yes** or **No**

TIP:

Even if an aircraft has deice or anti-ice equipment, it may not be certified for flight into known icing conditions. In fact, few light GA aircraft have this certification.



Emergency Procedures: Engine Failure



FOLD HERE

Emergency Procedures: Engine Failure

Memory Items:



Emergency Procedures: Engine Fire on Start



FOLD HERE

Emergency Procedures: Engine Fire on Start Memory Items:



Emergency Procedures: Engine Fire in Flight



FOLD HERE

Emergency Procedures: Engine Fire in Flight Memory Items:

