



# SAFETY BRIEF

AEROCAREERS



FLYING CLUB

ISSUE 3 -- SPRING 2021

## BEWARE OF BIRD'S NESTS

It's that time of year when birds are building their homes and they love the nooks and crannies inside aircraft. Birds are energetic and persistent. It's possible to remove all nesting material from an aircraft in the morning only to discover they've completely rebuilt their nest in the afternoon.

All bird nest material should be removed from any accessible area before flight. Pay particular attention to engine compartments to prevent inflight fires. A nest in the engine compartment needs to be completely removed and that may require removing the engine cowling to clean the cooling fins and rear cylinder areas.

## FUEL SERVICING PROCEDURES

Our private self-service fuel facility is available for your convenience. Please help us keep it safe and useable.

Detailed fueling instructions are available inside the fuel book in the orange dry box. Please follow them. Common errors are not turning the pump off at the electric switch and failing to lock the nozzle. Also, be certain to record the fuel you pump on the appropriate page in the fuel book. When fueling is complete, slowly retract the grounding wire to prevent it from tangling on the reel and hang the hose up so that it does not touch the ground.

## FLIGHT PARK'S WEATHER STATION

You can access Flight Park's weather station by taking a photo of the QR code at right or by clicking on the link in the middle of our website, [www.1il4.com](http://www.1il4.com).

NOTE: The outdoor temperature sensor is stuck on 51.1 degrees. A new sensor is on order.



## AEROCAREERS AIRCRAFT REMINDERS

Please take care of N123AC as if it was your own. We have often seen the aircraft parked without the control lock installed, with loose tiedown straps, the pitot tube cover missing, and even the seatbelt hanging outside the door and swinging in the wind. When based at Flight Park, ensure both doors are locked and the key is on the hook inside the hangar.

The target oil level should be 5-1/2 to 6 quarts. If filled with more oil, the Continental engine will quickly throw a quart of oil out through the breather tube.

## SPRING RUNWAY CONDITIONS

Spring downpours can change runway conditions significantly. Fortunately, now that we're seeing plenty of warm sunshine, the runway dries rather quickly. After heavy downpours or multiple days of rain, there are a couple of persistent soft spots.

Generally, the right side of either runway is the driest until you reach the taxiway. After a heavy rain, three spots tend to be soft: about 600 feet down the left edge of runway 24; about 1,000 feet down and slightly right of runway 24's center; and about 1,600 feet down and right of center. Avoid those areas when taxiing and be aware they may cause unexpected deceleration if they are holding water. (We will be improving the drainage ditches soon.)

You can check the amount of rain received by visiting our weather station. If you are in doubt about runway condition, you may carefully drive the runway to check its condition. Please drive cautiously to avoid leaving any ruts.

## PERFORMANCE ON SOD RUNWAYS

Most aircraft handbooks address aircraft performance on sod runways. Takeoff distance may be increased by as much as 20 percent on well-maintained sod runways.

When was the runway last mowed? Is the ground soft or grass wet? Is it hotter than the POH standard 59-degree day?

Always leave yourself a margin of safety. If you're fully loaded on a high density-altitude, hot and humid day, consider having your passengers meet you at St. Louis Downtown Airport (CPS) and pick them up there. Better safe than sorry!

How does sod affect landing distance? Most pilots expect it to shorten their landing distance because they are used to feeling additional deceleration. That is incorrect! Landing distance tables are based on maximum braking and grass is slicker than pavement, so your actual landing distance will increase as much as twenty percent when it really counts.

## AEROCAREERS CESSNA PERFORMANCE

Computed takeoff distance over a 50-foot obstacle for N123AC, at 2,300 lbs. on a no-wind, 85-degree day is 1,795 feet. That leaves only 500 feet of unused runway if you do everything right. The runway begins to look quite short.

A heavy Skyhawk on a hot, no-wind day requires 1,518 feet to stop at our airport. A little morning dew will increase that distance significantly.

Be sure to take all factors affecting aircraft performance into consideration BEFORE you attempt to takeoff. Use proper soft-field procedures and maintain good airspeed control.

Don't let a lack of aircraft performance surprise you.