

Check Your Airplane for Nesting Birds

ATA 99-00 All Propeller Models

With warmer weather now in place in many areas, operators should inspect their aircraft more frequently for the telltale signs of bird activity through the spring and into mid-summer. Some bird species instinctively seek out nesting locations safe from predators. Small hollow spaces offered by a parked airplane can sometimes seem like a perfect location to a bird for a nest.



Cooling airflow blocked by the nesting materials can cause critical aircraft systems to overheat, and can be a flight safety concern too. A nest left in close proximity to the engine exhaust system can catch fire, or could interfere with flight control movements.

Over an extended period of time, a bird nest left unchecked can also result in costly maintenance and damage too. Some birds introduce trash-type debris such as plastic bags that can collect moisture in the airfoils and fuselage structures. Combined with bird droppings containing uric acid, a potential for airframe corrosion can develop, including damage to the exterior paint.

Preflight Tips

Look for evidence of any bird activity near the airplane. Bird droppings may be found on the exterior surfaces and/or under the airplane. If there are a lot of bird droppings near the nose of the airplane or on the nose landing gear, it is wise to spend the extra time to investigate—even if it requires an engine cowl removal. Another clue to look for would be loose clusters of grass or debris found under or around the airplane that normally would not be there.

During the preflight walk-around, use a flashlight or mirror, (reflecting the sunlight,) to look into any air inlet, exhaust, cavity, vent, or hole that might be conducive for a bird shelter. Birds can squeeze themselves into tight places so it is a good idea to look carefully into gaps around the flight controls and in the landing gear wells. Also check the pitot tube(s), fuel or oiler cooler vents and tailcone openings for foreign objects too.

If a bird nest is discovered during preflight, the location determines what needs to be done before and after dispatch. If the nest is located in the airframe or landing gear wells, the nest material can generally be removed immediately or at the next scheduled maintenance period or inspection. However, if the nest is found in an area that can affect flight control movements or can cause a system to overheat, the foreign matter must be removed completely before the flight.

It is also wise to keep a spray bottle of water and a rag handy to clean up bird droppings to help prevent damage to the paint. Also the white bird droppings on the backside of a spinning propeller on a single engine airplane can be very annoying or distracting to the eyes. This can happen while flying and scanning the airspace for traffic, or during an instrument scan inside the cockpit for Instrument Meteorological Conditions (IMCs).

Preventive Steps

If the airplane is parked outside, keep the propeller positioned straight up and down for two-bladed propellers or in the “Y” position for three-bladed propellers. This helps discourage birds from landing and leaving bird droppings on the propeller and spinner.

Purchase a set of engine cowl plugs to keep birds out of the engine area. Make sure the plugs are colored or marked in a manner they can easily be identified and removed during the preflight.

Block all openings in the wheel wells, tail cone, or vent openings with proper plugs or locally manufactured materials. Make sure any these items are also colored or marked to be easily identified for removal during the preflight.

Don't forget to install the pitot tube cover(s) too—the opening could become blocked by windblown debris or a mud dauber nest.

Stay Vigilant with the Inspections

Be aware that birds are very persistent once they chose a nesting site. They do not associate a nest removal as final deterrent to stop from building another one. With an over-powering behavior to procreate, birds will sometimes return and continue to create headaches for an airplane operator until the nesting season is over.