

Aircraft in Wildlife Law Enforcement

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Abstract: Wildlife law enforcement operations cover vast areas of a state. Aerial surveillance, using small aircraft, is an excellent aid to the ground-based wildlife enforcement officer in locating potential violations. Such aircraft have a deterrent effect on violators and can also be used by the Agency's other divisions.

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The North Carolina Wildlife Resources Commission began using aircraft approximately 30 years ago. The primary use of the aircraft at that time was to assist ground units with enforcement of game laws, especially small game hunting.

In early years, it was not uncommon on any Saturday in November for 1 aircraft to keep 3 or 4 ground vehicles busy all day checking rabbit, quail, and squirrel hunting activity. Over time, however, the use of the aircraft changed as hunters changed their preferences.

Today, with the decline of rabbit and quail hunting, the use of the aircraft to monitor these activities has likewise declined. At the same time though, the popularity of deer and raccoon hunting has led to increased use of aircraft to monitor these types of hunting.

The North Carolina Wildlife Resources Commission owns and operates 4 PA-18-150's, IFR certified. This style of aircraft, often called the "supercub," works well in wildlife law enforcement for several reasons. The observer sits behind the pilot, giving him an unobstructed view from both sides. The aircraft can fly slowly, allowing both pilot and observer time to thoroughly scan the landscape. It flies much more quietly than many other airplanes, especially helicopters, and thus is less likely to attract attention to itself. Takeoff and landing distances for the plane are short, enabling it to use a variety of landing strips near areas needing surveillance. Operating costs and upkeep on this type of aircraft are less than on larger airplanes.

Pilots for these aircraft are hired from the ranks of the wildlife enforcement division. Officers who have an exceptional knowledge of the game, fish, and boat laws, and who have already worked with the Commission aircraft as observers, make the best transition to enforcement pilot. Currently the agency has 4 pilots who are commercial, instrument, and multi-engine rated. All of the current pilots were completely licensed before they made the transition from enforcement officer to enforcement pilot.

Each aircraft is flown between 600 and 900 hours per year, depending on activity and weather conditions. Approximately 80% to 90% of these hours are law enforcement work.

Night flights make up > 50% of the enforcement hours flown by the aircraft. Night deer hunting, raccoon hunting, night fishing, and night boating are the activities worked most often during these night flights.

Persons who violate the laws enforced by the North Carolina Wildlife Resources Commission often do so at night. Fortunately, for law enforcement, most of them must use lights in their illegal movements. A 200,000 candlepower Q-Beam light can be seen for miles from an aircraft as it sweeps a remote field in deer country. Careful observation can also detect much dimmer lights used by trappers, fishermen, or raccoon hunters.

A normal night hunting detail consists of the airplane, pilot, observer, and 2-5 patrol vehicles with 2 men, if possible, in each unit. While the aircraft and pilot are the key factors in the detail, the observer also plays an important role. Observers should be familiar with the area to be flown in such detail that they will be able to guide the ground units to a possible violation by the quickest route. Violators, figuring out they are being observed from the air often will attempt to elude ground units by using excessive speed or by driving without lights. These cases test both the pilot's ability to keep the vehicle in sight and the observer's knowledge of the area and road system. A good observer will know practically every curve, hill, and house in an entire county and will keep calm on the 2-way radio.

Violators in very remote places have been supervised by wildlife officers using surveillance aircraft. Most plead guilty to the charges and the case is usually settled without the role of the airplane ever being known.

On a good night the aircraft operating in an area with a high deer population has assisted in as many as 12 arrests for spotlighting in a 6-hour period. In 1987, 3 aircraft assisted ground units with 630 arrests and > 100 of which were for firelighting deer. In 1987, 3 aircraft flew a total of 2,007 hours for the North Carolina Wildlife Resources Commission.

Flights of the enforcement airplanes during daylight hours are scheduled to work a wide variety of activities such as small game hunting, trapping, closed season and big game hunting, waterfowl hunting, locating baited duck blinds, and dove fields, and closed season trout fishing. Daytime flights allow more details to be seen from the air than do night flights. At night, observers are mainly looking for lights, but during daylight hours, vehicles, boats, and people all are observed. Whether it's a hunter trying to elude wildlife officers in heavy cover, a preseason trout fisherman

trying to get back home ahead of the ground units, or a careless and reckless motorboat operator who's endangering others lives, observers in aircraft can usually maintain contact and stay well ahead of the violator in order to cut off all escape routes.

The value of the aircraft in wildlife law enforcement work cannot be measured exclusively in terms of the numbers of arrests made. But since this topic is pertinent to enforcement work, very accurate records of hours flown and arrests made are kept. These records show that over a year's time, the aircraft finds an average of 1 violation per 2.8 hours of flight time. This is an excellent average considering that much flight time is spent just getting to and from the work area and in picking up and returning the observer. Although hard to measure, wildlife aircraft also deter wildlife violators. It is not uncommon to hear people in country stores crediting a wildlife aircraft with catching some violators. The deterrent effect is apparent when it's known that the wildlife aircraft wasn't 100 miles of the area on the night in question. The plane seen was a private pilot who never knew the effect he had on the situation.

Commercial and private pilots who are familiar with wildlife enforcement work and our use of aircraft, also play an active roles in the apprehending wildlife violators. Commercial flight crews and private pilots commonly call and give the location of someone using a spotlight. They sometimes even offer assistance in catching the violator.

In addition to their obvious uses in enforcement work, wildlife aircraft in North Carolina are used by the other divisions in the North Carolina Wildlife Resources Commission. The Conservation Education Division uses the aircraft to take still photographs for use in "Wildlife in North Carolina" magazine and in news releases to statewide newspapers. Motion picture photography is also done from the aircraft. Television news photographers have flown in wildlife planes to shoot video footage to supplement television news features.

The Division of Wildlife Management uses aircraft in a number of its projects, including aerial tracking of bear, deer, raccoon, otters, and eagles in order to study their movement patterns. Wildlife biologists make yearly waterfowl counts from aircraft to supplement information from the U. S. Fish and Wildlife Service. This information is then used to help establish waterfowl hunting seasons. Bald eagle count surveys are done yearly to keep better records of our national bird's comeback in North Carolina. Locating and mapping beaver ponds is also done by plane to monitor the spread of this once endangered species that is becoming a pest in many areas of the state. Another prime use of the aircraft has been in locating and marking sea turtle nests on the North Carolina coast. Once the nests are located, the eggs are moved to safer locations so that thousands of baby turtles that might otherwise have died will hatch safely.

The Division of Boating and Inland Fisheries also uses the enforcement aircraft to determine the extent of fish kills and to occasionally find the source of the killing agent. Finding locations for new boating access areas is aided by doing aerial surveys of the lakes and rivers of the state.

Search and rescue is an important part of the non-enforcement work North

Carolina's wildlife aircraft do. There are several spur-of-the-moment flights made each year. These flights are usually made at the request of other law enforcement agencies. The most common flights are searching for drowning victims, lost hunters, hiker's boats, and assisting in felony manhunts and drug detection.

The North Carolina Wildlife Resources Commission operates and maintains an aircraft under Part 91 of the Federal Aviation Regulations (FAA). The agency has a waiver from the FAA to operate below what the FAA considers the minimum safe altitude. In order to procure and maintain this waiver, the agency is required to operate in accordance with an aircraft operations manual and to take yearly check rides.

The maintenance program for the agency's aircraft includes performing 50-hour and 100-hour inspections on each aircraft along with compliance of all FAA airworthiness directives. Good maintenance and safety are of the utmost importance to the agency and so far has led to an excellent safety record.

Aircraft have a place in wildlife law enforcement and they are a useful tool for the Wildlife Resources Commission and other agencies. Under strict supervision and with proper maintenance, they can become a vital part in any wildlife agency's total program of serving the outdoor-using public.