

Review to look at unmanned aircraft safety



From the "Flying Fish" seaplane to something with a wingspan of a Boeing jetliner, an expected surge in unmanned aircraft could pose a challenge for those responsible for keeping U.S. skies safe.

That's why members of Congress influential on aviation matters have asked an independent government watchdog to review whether the Federal Aviation Administration is making progress on meeting a new law to develop a plan for managing that growth.

The agency estimates that unmanned aircraft could number 10,000 in five years.

"While the capabilities of unmanned aircraft have significantly improved, they have a limited ability to detect, sense, and avoid other air traffic," Jeffrey Guzzetti, who handles aviation audits for the Transportation Department's inspector general's office, said in a memo announcing that agency's examination of FAA preparedness.

More than 50 companies, universities and government organizations are developing and producing some 155 unmanned aircraft designs in the United States alone, according to the FAA.

Broadly defined, the category includes everything from the "Flying Fish," an 18-pound seaplane the FAA authorized a university to fly over a Michigan lake, to planes with wingspans of more than 100 feet, or similar to a Boeing 737.

Small unmanned aircraft, which are expected to make up the bulk of those flying in U.S. airspace, typically weigh less than 55 pounds

and fly below 400 feet. Larger aircraft can fly higher than 10 miles and stay up for days.

Unmanned aircraft are valued domestically for dirty and dangerous activities, such as penetrating smoky forest fires or hurricanes. They also do lengthy and tedious jobs, such as border security or conducting long-term surveillance.

The FAA has approved unmanned operations on a limited case-by-case basis due in part to safety risks associated with integrating the variety of unmanned systems with existing operations by private planes, helicopters and jetliners.

The Government Accountability Office, the investigative arm of Congress, reported in 2008 that unmanned systems could not meet safety requirements developed for manned aircraft, posing several obstacles to safe and routine operation in conventional airspace.

That watchdog said in September that some progress had been made since its report four years ago, but additional work was necessary to overcome technical and operational obstacles.

The nation's airspace accommodates an average of more than 100,000 flights per day involving private, commercial and military aircraft.

Experts say unmanned aircraft can be more difficult than manned aircraft to fly because those operating them from ground stations can't feel the weather, hear the engines or see their surroundings. Moreover, problems in the air can be difficult to troubleshoot from the ground.

An FAA official said in 2010 that unmanned aircraft patrolling the nation's borders have an accident rate seven times greater than general aviation - privately piloted - aircraft, and 353 times the rate of jetliners.

In one incident in 2006, a pilotless Customs and Border Protection aircraft lost contact with the ground and glided for 14 minutes through 30 miles of open airspace in Arizona before crashing several hundred yards from a house.

But a new federal law this year setting out the next steps for transforming U.S. air traffic control to a satellite-based system and establishing other aviation priorities, called on the FAA to develop a comprehensive plan for managing unmanned aircraft by 2015. The inspector general's review, requested by the leaders of the Senate Commerce and the House Transportation committees, will assess that effort as well as related safety issues.

The FAA said it has already met one congressional requirement by streamlining the process for public agencies to safely fly unmanned aircraft.

The agency responsible for air traffic control and aviation safety regulations also has relaxed restrictions, and now allows law enforcement, in certain cases, to operate small unmanned aircraft no higher than 400 feet during daylight.

The agency is also in the process of selecting several sites for testing integration of manned and unmanned aircraft.

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