

Justice Department Releases Aviation Study Results

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Aviation units performed a great variety of missions in 2007 while having fewer significant accidents.

In 2007, aviation units in large law enforcement agencies operated nearly 900 aircraft, employed over 1,300 full-time sworn pilots and logged approximately 360,000 flight hours. In the course of flying an estimated 385,000 missions, 80 percent of aviation units performed functions related to homeland security and counterterrorism, 90 percent engaged in counternarcotics surveillance operations, over 90 percent assisted with vehicle pursuits and provided direct assistance to ground units in arrests, and nearly all aviation units responded to calls for service or requests for assistance.

These are among the findings from a study sponsored by the U.S. Department of Justice, Bureau of Justice Statistics (BJS) that collected nationwide data from state and local law enforcement agencies with 100 or more sworn officers and at least one fixed-wing plane or helicopter. BJS, the statistical arm of the Department of Justice, gathers, analyzes and disseminates data on a range of criminal justice subjects, from law enforcement to courts to corrections. For the national study on aviation units, BJS worked with the U.S. Census Bureau to send questionnaires to all state and local law enforcement agencies that had previously reported operating at least one plane or helicopter. The questionnaires asked aviation units to report on the equipment used, expenses incurred, personnel employed, functions served, and training and safety requirements in place during reference year 2007.

With assistance from the Airborne Law Enforcement Association and cooperation from aviation unit officers in agencies around the country, BJS successfully concluded the study earlier this year. The results from the study were recently released in a BJS report titled *Aviation Units in Large Law Enforcement Agencies, 2007*.

General Characteristics

In 2007, an estimated 20 percent of all law enforcement agencies with 100 or more sworn officers operated at least one fixed-wing plane or helicopter. Of these 201 aviation units, almost 40 percent were in sheriffs' offices, about 35 percent in municipal police departments, 25 percent in state police agencies and less than 10 percent in county police departments.

The 201 aviation units operated a total of 899 aircraft, which equated to about 600 helicopters and 300 planes. Half of all aviation units operated helicopters only. About 40 percent of the units had both planes and helicopters in their fleets, and just over 10 percent flew only planes. None of the aviation units reported the use of any other type of aircraft, including unmanned aerial vehicles, light sport aircraft, ultralight aircraft or powered parachutes.

Expenditures

Nationwide, aviation units spent an estimated \$300 million in 2007 on the purchase, leasing, financing, maintenance and fueling of police aircraft. Individual aviation units spent approximately 1 percent of overall agency budgets—a median of about \$350,000 per unit—on these specific aircraft-related expenses. Approximately 20 percent of aviation units added an aircraft to their fleets in 2007, making aircraft purchase the largest expenditure category, totaling about \$159 million.

Plane-only units spent less in 2007 than helicopter-only units. Units operating only planes reported median expenditures of \$35,500, compared to helicopter-only units, which spent a median of \$132,000 per unit. While the higher median expenditures for helicopter-only units could be related to these units operating a greater number of aircraft, on a per-flight-hour basis, the maintenance and fuel costs were also higher for helicopter-only units.

Units with helicopters only reported spending a median of \$168 per flight hour on maintenance expenses and \$74 per flight hour for fueling costs. For plane-only units, the median expenditures were \$54 for maintenance and \$45 for fuel per flight hour.

FLEET STATUS

Of the 899 aircraft flown by large law enforcement agencies, nearly 70 percent were purchased outright by the agency or aviation unit. The second most common method of acquisition, through which about a fourth of all aircraft were attained, was the Department of Defense Section 1033 surplus program. Among the four types of agencies, sheriff's office aviation units had the highest percentage (43 percent) of aircraft obtained through the government surplus program.

Sheriff's office aviation units also had the highest average percentage (61 percent) of aircraft in their fleets that were 20 years old or older. About 45 percent of all aviation unit aircraft were 20 years old or older. On average, 5 percent of the aircraft were one year old or less and 15 percent were between one and five years old.

FLIGHT HOURS & MISSIONS FLOWN

In 2007, aviation units logged a median of 1,100 flight hours in the course of flying 1,000 missions per unit. State police units reported the highest median number of flight hours for 2007 (2,000 per unit) but flew a median of 800 missions per unit. County police units, on the other hand, reporting flying the most missions (a median of 2,500) and logged about 1,200 flight hours per unit.

This variation in flight hours and missions flown can be attributed to the finding that state police aviation units flew missions that lasted a median of 2.2 hours per mission, followed by sheriff's office units, which spent about 1.2 hours per mission, and then municipal (0.7) and county (0.5) police units, which each flew missions tending to last less than an hour.

In general, aviation units tended to accrue more flight hours and missions flown in helicopters than in planes.

FUNCTIONS PERFORMED

Almost all aviation units (98 percent) reported responding to calls for service or requests for assistance in 2007. More than nine out of 10 units provided direct assistance to ground units in arrests and engaged in vehicle or foot pursuits. Though not all aviation units were able to report on the number of times various functions were performed, the two most frequently conducted aviation unit activities were responding to calls for service and issuing traffic citations. Less than half of units, however, reported issuing any traffic enforcement citations in 2007.

Nearly eight out of 10 aviation units served a homeland security function, performing critical facility checks or flying other counterterrorism related missions, and approximately nine out of 10 units performed counternarcotics or other criminal activity surveillance. About one out of three aviation units performed tactical insertions of SWAT team members or an air ambulance emergency response mission in 2007. Approximately 60 percent of the 201 aviation units participated in a firefighting mission.

PILOTS & TRAINING REQUIREMENTS

Aviation units nationwide were assigned a total of about 3,400 sworn and non-sworn, full- and part-time personnel. Of these total personnel, over half (51 percent) were pilots. Aviation units employed a median of about five pilots per unit, the majority of whom (77 percent) were full-time sworn officers.

Just over half of all units required pilots to have previous law enforcement experience, and 63 percent required pilots to hold FAA ratings prior to joining the unit. In order to serve as pilot in command for a plane, almost 70 percent of units required the pilot to have a commercial license. For helicopter PICs, nearly 75 percent of units required a commercial license.

In 2007, nearly 40 percent of aviation units paid for any initial, advanced or recurrent training required of pilots. Another 44 percent of units paid for some of the required training, with most units (93 percent) funding recurrent training, like refresher courses on aircraft systems, emergency procedures or various mission protocols.

SAFETY STANDARDS & PROCEDURES

About nine out of 10 aviation units had a designated safety manual, conducted safety meetings and/or held private insurance in 2007.

Among the four types of agencies, the largest variation was in the percentage of units with a designated safety officer. Overall, about 75 percent of aviation units had a designated safety officer, but this percentage ranged from over 80 percent among municipal police units to just over 60 percent of county police units.

From 2003-2006, the 201 aviation units reported a total of 32 incidents in which an aircraft caused damage or injury or was damaged during use. In 2007, there were three such accidents, all of which involved a plane.

The complete report, Aviation Units in Large Law Enforcement Agencies, 2007, is available for download at www.ojp.usdoj.gov/bjs/abstract/aullea07.htm.