Why GAO Did This Study

FAA considers each laser incident an in-flight emergency, because of the potential for an accident and adverse effects of lasers on pilots. FAA data show the number of incidents in 2021 was the highest on record, with 9,273 incidents reported—an increase of about 42 percent from 2020.

GAO was asked to review federal efforts related to addressing laser incidents. This report examines, among other things: (1) the extent to which FAA and other agencies take action against those who point lasers at aircraft and challenges to investigations and reporting, and (2) public outreach efforts FAA and other agencies take to deter laser incidents.

GAO reviewed relevant statutes and regulations and assessed FAA’s actions against GAO’s work on managing for results. GAO analyzed FAA and Department of Justice data from July 2016 through September 2020 on enforcement actions and interviewed 15 aviation and local law enforcement entities to obtain a range of perspectives.

What GAO Recommends

GAO is recommending that FAA determine what information is most useful for investigating laser incidents and how best to collect and share it with law enforcement and that FAA routinely seek investigation and enforcement data from agencies for reporting to Congress; and explore re-establishing an interagency working group to collaborate on laser incident outreach. FAA concurred with these recommendations.

View GAO-22-104664. For more information, contact Heather Krause at (202) 512-2834 or krauseh@gao.gov.

What GAO Found

Aiming a laser at an aircraft can distract or disorient pilots and is a federal crime. The Federal Aviation Administration (FAA) investigates laser incidents, pursues civil penalties, and assists the Federal Bureau of Investigation (FBI) and U.S. Attorneys with investigations. Given the nature of laser incidents, FAA and federal law enforcement face difficulties identifying those involved. However, they have taken some enforcement actions, resulting in penalties ranging from $50 to $27,388 and sentences of up to 51 months, according to GAO analysis. To support incident investigations, FAA asks that pilots complete an incident questionnaire upon landing. However, FAA received responses for about 12 percent of the 8,221 laser incidents that occurred over a recent one-year period from 2020 to 2021. Reasons identified by FAA and others for the low response rate include the length of the questionnaire and its voluntary nature. Further, FAA does not consistently share collected information with law enforcement.

In 2016, Congress required FAA to report quarterly on laser incidents, including data on civil and criminal actions. However, GAO found FAA’s reports to be incomplete. For example, GAO’s analysis shows 44 prosecutions from July 2016 through September 2020, when FAA reported only four. FAA officials said they do not routinely request data on the status of actions from other agencies and face challenges, such as access to this data. By not routinely seeking updates from agencies, FAA does not provide Congress with a complete picture of laser incident investigations and enforcement actions as required.

Example of the Effects of a Laser Pointer Aimed at an Aircraft Cockpit

Source: Federal Aviation Administration and Federal Bureau of Investigation. | GAO-22-104664

FAA, FBI, and the Food and Drug Administration, which has regulatory authority over lasers, each conduct outreach to educate the public about laser incidents. These agencies were involved in an interagency group to address laser safety concerns until 2015 when the group dissolved. Since then, laser incidents have increased and identifying subjects remains difficult. FAA is well positioned to lead an interagency effort to explore re-establishing this group, given FAA’s responsibility for the safety of the national airspace.