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VERY LIGHT JETS

Several Factors Could Influence Their Effect on the National Airspace System

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Highlights

Highlights of GAO-07-1001, a report to congressional requesters

Why GAO Did This Study

For several years, a number of aviation manufacturers have been designing and testing very light jets, a type of small jet aircraft equipped with advanced technologies and priced below other business jets. Aviation forecasters predict that thousands of very light jets will enter the National Airspace System (NAS) over the next two decades, contributing to the overall growth of the general aviation fleet. While some experts predict that very light jets will be used in ways that are similar to current general aviation aircraft, others predict that they will be used to expand the air taxi market to provide on-demand, point-to-point air transportation. In 2006, the Federal Aviation Administration (FAA) certified the first very light jets for flight. This report identifies (1) current very light jet forecasts and what factors could affect very light jet deliveries, (2) how increasing numbers of very light jets might affect the capacity and safety of the NAS, (3) how FAA is planning to accommodate the entry of very light jets into the NAS, and (4) how very light jets might affect FAA's costs and Airport and Airway Trust Fund revenues. To address these issues, GAO reviewed relevant documents and interviewed agency officials and aviation experts.

GAO is not making recommendations in this report. The Department of Transportation provided technical clarifications, which were incorporated as appropriate.

www.gao.gov/cgi-bin/getrpt?GAO-07-1001.

To view the full product, including the scope and methodology, click on the link above. For more information, contact Susan Fleming at (202) 512-2834 or flemings@gao.gov.

What GAO Found

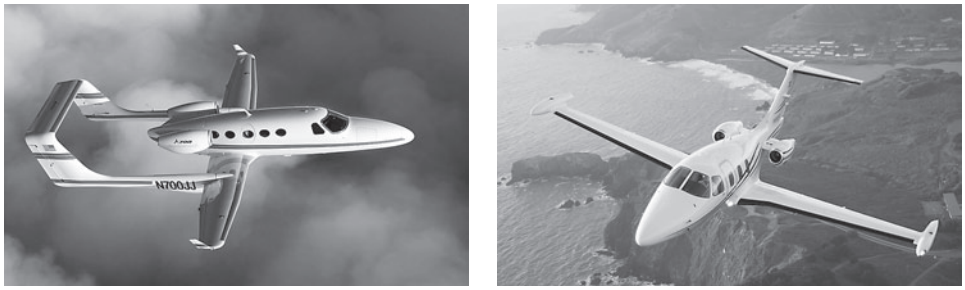
The eight very light jet forecasts GAO examined provided a range of both the number of very light jets projected to be delivered (roughly 3,000 to 7,600) and the dates by which those numbers would be reached (from 2016 to 2025). The forecasts were based on limited information about the market for very light jets and varied based on a number of assumptions, particularly regarding the development of the air taxi market.

The studies GAO reviewed and the experts GAO contacted expressed varying opinions about the impact of very light jets on NAS capacity; however, most of the experts believed that very light jets would have little overall effect on safety. The studies found that the type of airports used by very light jets will influence very light jets' effect on capacity. Experts also mentioned other factors that could affect capacity such as aircraft usage, trip length, and altitude. Most experts GAO contacted believed that very light jets will likely have little impact on safety due to FAA's certification procedures for aircraft, pilots, and maintenance.

According to FAA officials, the agency currently has policies and procedures in place to accommodate the entry of very light jets into the NAS because the aircraft will operate similarly to other aircraft and will enter the NAS incrementally. Nonetheless, FAA is taking steps to address issues associated with very light jets by establishing a cross-organizational group to facilitate communication about very light jets across the agency. In addition, FAA expects that the deployment of modern air traffic management technologies will help to integrate very light jets in the long run.

The impact of very light jets on FAA's costs and Trust Fund revenues will depend on factors such as the number of very light jets deployed, the extent to which they replace existing aircraft, and whether they facilitate a large-scale air taxi industry. The Congress is considering legislation that could affect how very light jets are taxed but, as with the current funding structure, there is too much uncertainty about very light jets to accurately compare the revenue effects of these proposed alternative funding structures.

Examples of Very Light Jet Aircraft



Source: Adam A700; Adam Aircraft Industries (left), and Eclipse 500; (c) copyright, Eclipse Aviation Corporation, 2007 (right).