Highlights of GAO-22-105223, a report to congressional committees

Why GAO Did This Study
Air Force is among the largest federal funders of SBIR and STTR awards to small businesses. It issued over 4,800 such awards in fiscal years 2016 through 2020 to support companies’ technology commercialization and provide technology solutions to meet Air Force’s needs. Since 2018, Air Force has rapidly expanded the new open topics SBIR/STTR awards process.

The House committee report accompanying the National Defense Authorization Act for Fiscal Year 2021 includes provisions for GAO to review the new process. This report examines (1) how Air Force implemented its new awards process and (2) what is known about the process’s effectiveness—as compared to Air Force’s conventional SBIR/STTR awards process—in attracting a broad range of companies; reducing award issuance times; and enabling commercialization through subsequent venture capital investment or non-SBIR/STTR federal contracts.

GAO analyzed Air Force SBIR and STTR award data from fiscal years 2016 through 2020 and documents, including evaluations of the new process. GAO also analyzed contract files for a non-generalizable sample of 17 awards, and interviewed Air Force and DOD officials and awardees.

What GAO Recommends
GAO is making two recommendations to improve Air Force’s reporting and data reliability on certain small business participation. DOD agreed with the first recommendation and partially agreed with the second, as discussed in the report.

View GAO-22-105223. For more information, contact Candice Wright at (202) 512-8889 or WrightC@gao.gov

SMALL BUSINESS RESEARCH PROGRAMS

Air Force Had Success in Some Areas with New Awards Process

What GAO Found
In June 2018, Air Force implemented a new “open topics” process for issuing Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) awards to attract new small businesses and deliver technology solutions faster to the Air Force. The new process gives companies more latitude to propose technology solutions to meet Air Force’s needs. Expansion of the new process coincided with an overall increase in Air Force’s SBIR/STTR effort. By the end of fiscal year 2020, the new process had largely displaced the agency’s conventional awards process, in which specific problems and mission needs were identified by Air Force (see figure).

Number of SBIR or STTR Awards, Dollars Awarded, and Number of Companies that Received Awards under Air Force’s Open Topics or Conventional SBIR/STTR Awards Process, Fiscal Years 2018 through 2020

<table>
<thead>
<tr>
<th>Year</th>
<th>Open Topics Awards</th>
<th>Conventional Awards</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>1,200</td>
<td>800</td>
</tr>
<tr>
<td>2019</td>
<td>1,500</td>
<td>1,200</td>
</tr>
<tr>
<td>2020</td>
<td>1,800</td>
<td>1,500</td>
</tr>
</tbody>
</table>

Source: GAO analysis of Air Force Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) awards data.

*Companies that received both open topics and conventional awards in fiscal years 2018 through 2020 are included more than once in the bar graph showing the number of companies.

Air Force’s new process was more effective than its conventional SBIR/STTR awards process in attracting new companies and issuing awards quickly. According to GAO’s analysis of Air Force SBIR/STTR award data and federal contracting data, around 43 percent of the 1,001 open topics awardees had no prior federal contracts, compared to 14 percent of the 771 conventional awardees. Also, Air Force took between 108 and 126 fewer days, on average, to issue open topics awards in fiscal years 2019 and 2020 for the first SBIR/STTR program phase. An April 2021 study found that open topics awardees were more likely to obtain subsequent venture capital or non-SBIR/STTR federal contracts.

Data and assessment gaps, however, limit Air Force’s ability to evaluate the effectiveness of the new process. Its 2021 impact report did not address whether participation among women-owned small businesses increased, as called for in the committee report. Also, Air Force did not ensure the report’s data on participation by disadvantaged businesses and company size was current and reliable. Ensuring data in such reports are current and reliable would aid Air Force in assessing the reach and effectiveness of the open topics process.