Small Businesses Participate in Reverse Engineering of Spare Parts

What GAO Found

The Defense Logistics Agency (DLA) is responsible for providing logistics support to the warfighter, including spare parts for military assets. From fiscal years 2015 through 2018, DLA initiated over 1,600 reverse engineering projects for spare parts at three of its commands—Aviation, Land and Maritime, and Troop Support. DLA uses reverse engineering to identify potential new sources for spare parts that are available from only one source and to achieve savings. DLA funded about 1,000 of the reverse engineering projects, while contractors funded the remaining 600 projects. Nearly two-thirds of all reverse engineering projects involved parts in five categories, with examples of the three largest categories illustrated in the figure.

Examples of Reverse Engineered Parts

- **Hardware and abrasives**
  - Plain cap nut

- **Vehicular equipment components**
  - Tailgate step

- **Electrical and electronic equipment components**
  - Electrical contact brush holder assembly

Source: Defense Logistics Agency (DLA) Land and Maritime (center image); DLA Aviation (all other images).

GAO found that the majority of contractors conducting reverse engineering for DLA were small businesses. Specifically, DLA identified 124 contractors that conducted reverse engineering projects from fiscal year 2015 through 2018, 103 of which GAO determined were small businesses. According to small business representatives and DLA officials, reverse engineering is beneficial for small businesses and can help provide opportunities for additional business with DLA.

GAO found that the three DLA commands had processes to safeguard certain intellectual property in their reverse engineering efforts. Specifically:

- Officials from all three commands stated they do not release drawings with limited data rights to contractors interested in reverse engineering parts.
- Aviation and Land and Maritime officials stated that they check for patent markings on parts to ensure patented parts are not reverse engineered. Troop Support officials stated they do not check for patent marks because the parts they supply are often too old to have valid patents.

The small businesses GAO met with did not identify concerns with how DLA handles intellectual property. Further, DLA officials stated that they had not received any complaints from small businesses about their intellectual property being used inappropriately.