

Highlights of GAO-18-447, a report to congressional committees

## Why GAO Did This Study

Patriot is a mobile Army surface-to-air missile system deployed worldwide to defend critical assets and forces. The Army plans to extend the life of Patriot equipment until at least 2048 through maintaining and modernizing the system. To achieve this, the Army performs two maintenance processes, restoring equipment returning from combat back to pre-deployment conditions ("reset") and comprehensively overhauling ("recapitalizing") a portion of its equipment annually.

The conference report accompanying a bill for the National Defense Authorization Act for Fiscal Year 2017 included a provision that GAO assess the Army's Patriot maintenance and recapitalization plans to ensure that operational needs are met. This report (1) evaluates the extent to which the Army's reset process supports the timely delivery of Patriot equipment back to units; and (2) describes the Army's plans for supporting the longterm viability of the Patriot system through recapitalization and any challenges associated with its plans. GAO analyzed Army guidance and equipment and maintenance data: interviewed Army officials; and assessed the Army's recapitalization plans.

#### What GAO Recommends

GAO recommends that the Army conduct an analysis of the primary factors affecting the Patriot program's reset timeliness to identify their relative importance and develop and implement appropriate corrective actions. The Department of the Army concurred with GAO's recommendation.

View GAO-18-447. For more information, contact John Pendleton at (202) 512-3489 or pendletonj@gao.gov.

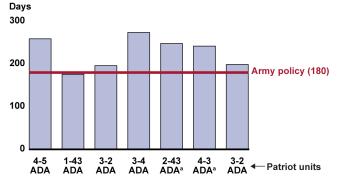
# MILITARY READINESS

# Analysis of Maintenance Delays Needed to Improve Availability of Patriot Equipment for Training

### **What GAO Found**

The Army uses reset and recapitalization to extend the life of its Patriot surface-to-air missile system. The reset process—which is intended to repair recently-deployed equipment—has often returned equipment to Patriot units late, which has affected unit training. GAO found that of the seven Patriot battalions that underwent reset from fiscal years 2014 through 2017, only one received its equipment within 180 days, in accordance with Army policy (see figure). Patriot unit officials told GAO that such delays reduced the time available for unit training, creating challenges in meeting training requirements as units prepare for their next mission. The Army has identified and analyzed several factors affecting reset timeliness, ranging from supply chain issues to transportation. However, the Army has not comprehensively analyzed the relative importance of these factors. Such an analysis would better position the Army to target its efforts effectively to ensure units receive equipment back in a timely manner.

### Patriot Equipment Reset Timeliness for Units, Fiscal Years 2014-2017



Source: GAO analysis of Army information. | GAO-18-447

Notes: Air Defense Artillery (ADA) is used as a designator in the names of Patriot units. <sup>a</sup>Reset of the 2-43 ADA and 4-3 ADA in fiscal years 2016-2017 included concurrent upgrades of equipment that added, according to officials, 60 days to their reset periods.

With respect to recapitalization, the Army has decided to recapitalize each battalion set of Patriot equipment once every 15 years to support the system's long-term viability through 2048, while recognizing that this approach introduces some challenges. The Army would prefer to recapitalize Patriot equipment every 10 years, but Army officials stated this is not feasible for the following reasons:

- Reducing the amount of equipment for ongoing operational commitments to increase the pace of recapitalization is not feasible given current commitments and the projected security environment.
- Buying extra equipment to provide to additional units undergoing recapitalization is not feasible because the Army has prioritized replacing the Patriot radar to improve its capability to defend against advanced threats.

Army officials told GAO that the current pace of recapitalization is not optimal and could introduce challenges, such as the possibility of equipment failure and increased maintenance costs. However, the Army has concluded that the current pace is the best path forward.