

## Why GAO Did This Study

According to DOD, our competitors and adversaries are taking advantage of vulnerabilities in the information environment to advance their national objectives and offset the U.S.'s position as the preeminent warfighting force. DOD's military operations in the information environment play a pivotal role in engaging our adversaries.

House Report 117-118 included a provision for GAO to review DOD training that prepares leaders and service members to operate and make decisions in a contested information environment. In this report, GAO (1) describes DOD guidance that supports the department's education and training efforts to prepare leaders to make decisions in a contested information environment and (2) assesses the extent to which DOD provides education and training designed to prepare leaders to make such decisions.

GAO reviewed selected DOD strategies, policies, and course syllabi; analyzed information related to the conduct of military exercises; and interviewed officials with knowledge of the department's education and training efforts.

## What GAO Recommends

GAO recommends that DOD (1) develop guidance about what content to incorporate in its education and training related to decision-making in a contested information environment and (2) assess the resources necessary to meet related education and training needs. DOD generally concurred with GAO's recommendations.

View [GAO-23-105608](#). For more information, contact Joseph W. Kirschbaum at (202) 512-9971 or [KirschbaumJ@gao.gov](mailto:KirschbaumJ@gao.gov).

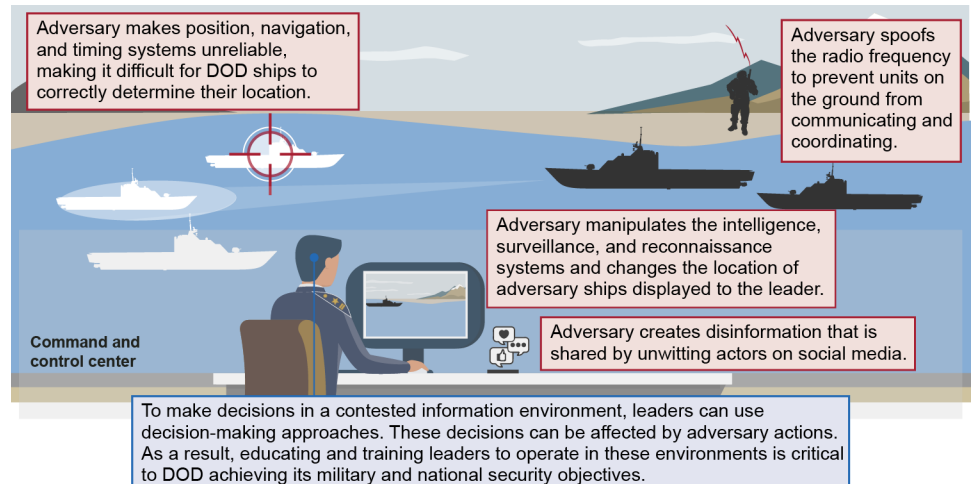
# CONTESTED INFORMATION ENVIRONMENT

## Actions Needed to Strengthen Education and Training for DOD Leaders

### What GAO Found

Department of Defense (DOD) guidance for operating in a contested information environment continues to evolve as DOD works to develop and prepare leaders to make effective decisions. The information environment—that is, the aggregate of factors that affect how humans and automated systems derive meaning from, act upon, and are impacted by information—is at risk of adversaries from anywhere attacking and contesting it to undermine DOD operations. In 2017 DOD elevated “information” as a joint function, and in 2019 it identified *Globally Integrated Operations in the Information Environment* as a special area of emphasis for education. As adversaries increasingly aim to distort or compromise information available to leaders, the focus on leader decision-making approaches becomes more important to minimize negative effects on military readiness and the successful execution of military operations (see figure). DOD continues to take steps—such as establishing a doctrinal, operational, and technical framework—to improve its understanding of and effective operation in increasingly contested information environments.

### Examples of Adversary Actions That Can Affect DOD Leader Decision-Making in a Contested Information Environment



Source: GAO analysis of Department of Defense (DOD) information. | [GAO-23-105608](#)

As part of its efforts to prepare for contested information environments, DOD offers education and training for its leaders. However, DOD components are unclear about what information environment aspects to cover in such education and training because guidance does not specify what content to include. DOD officials also reported having limited resources for their education and training efforts and cited simulation, infrastructure, and personnel limitations as further impeding these efforts. Officials stated that these limitations hinder the creation of realistic environments in which leaders can practice decision-making skills. However, DOD has not assessed or comprehensively reviewed component assessments of resources. Until DOD develops guidance and assesses its resources, it will lack assurance that it will be able to educate and train leaders to prepare them to make decisions in a contested information environment.