



Department of the Air Force
Scientific Advisory Board

**DEPARTMENT OF THE AIR FORCE
HEADQUARTERS AIR FORCE
WASHINGTON DC**

Air Defense Against UAVs Study

Abstract

This study addresses the challenges of developing a more effective Air Defense Against UAVs.

The study team conducted an extensive set of visits to Air Force operating commands and key operations centers, technology development centers, and industrial partners. We considered first as a baseline the current capability for air defense against manned aircraft. We then explored how existing systems can be used against the UAV threat. We then determined what possible short-term enhancements to the current systems would provide added capability and, finally, we looked at longer-term improvements including the insertion of new technology.

However, given the very wide range of threat that UAVs can pose, it is important to monitor closely UAV developments and proliferation so that the US Air Force can tailor its capabilities to meet the emerging threats. Recognizing the fiscal limitations on the current and projected USAF budget, we identified a number of recommendations that will result in improved air defense against UAVs. Each is presented in the full reports in greater detail, with associated implementation steps. Fortuitously, all the recommended advances would have the ancillary impact of improving defenses against manned aircraft and cruise missiles, enhancing air safety through airspace deconfliction, and improving the effectiveness of our own UAV operations.

Volume 1 – Unclassified Final Report

Volume 2 – Unclassified Final Report Annex

Volume 3 – Classified Final Report Annex

For Classified SAB recommendations, contact the following office:

PENTAGON OFFICE

USAF Scientific Advisory Board (SAB)

SAF/AQB (SAB Secretariat)

1060 Air Force Pentagon

Room 5E815

Washington, DC 20330-1060

Phone: 703-695-4295

Fax: 800-762-7407 or 703-695-4301

SAF PA Approval: 2025-0600