



U.S. Air Force
Scientific Advisory Board

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

Air and Surface Moving Target Indication Study

Abstract

The Department of the Air Force (DAF) Scientific Advisory Board (SAB) study on Air and Surface Moving Target Indication (MTI) Study provides an understanding on how MTI will operate effectively for surveillance and targeting data for air and surface targets in highly contested environments during peacetime, crisis, and wartime conditions.

The study panel reviewed relevant MTI Concepts of operations and requirements for sensor and platform capabilities. In addition, the panel determined technology requirements, their risks, and alternative allocations of these functions between the supporting systems and technologies to include tasking and sensor recourse management, communication systems and tracking and fusion systems to combine data from individual satellites. The panel also explored countermeasures and electromagnetic sensing systems. Finally, the panel proposed science and technology investments needed in the near-, mid-, and longer-term future to develop and deploy MTI Systems.

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