

SYSTEM OVERVIEW

This is a Lockheed Martin corporate wide Independent Research and Development (IR&D) program. The purpose of the IR&D program is to investigate technologies for system components of an Advanced Air Defense System (AADS) including radars, missiles, seekers and battle management/command, control, communications, computers, and intelligence (BMIC41). The Sensor Subsystem includes all aspects of the surveillance and fire control radar. The Sensor Subsystem consists of a Surveillance Radar Test Bed (SRTB) and a Fire Control Radar Test Bed (FCRTB).

The Sensor Subsystem is intended to operate with other elements of AADS for the purpose of demonstrating air defense system capabilities. Such demonstrations typically consist of SRTB detection and tracking of a test target of interest; cueing from SRTB to FCRTB; FCRTB acquisition and tracking of the target; cueing from the FCRTB, via a ground communications station (Ground Station), to a missile seeker mounted and operating in a captive flight test configuration; and ultimately, missile seeker acquisition, tracking, and aimpoint selection of that target. The Sensor Subsystem is also used for data collection to evaluate performance during demonstrations and other scenarios.