



# ORBITAL ATK

With more than twenty years of experience developing and commercializing technologies, it is easy to say that Orbital ATK's aim is spot on. Science and Applied Technology, Inc. (SAT), the original SBIR awardee for the Advanced Anti-Radiation Guided Missile (AARGM) SBIR program was founded in June of 1988 with its Phase I SBIR award coming just two years later, and subsequently a Phase II and Phase III award. SAT and its assets, including AARGM SBIR Data Rights, were subsequently acquired by ATK, Inc. in Oct 2002 and later merged with Orbital Sciences creating Orbital ATK, Inc. – the company was awarded the Advanced Technology Demonstration (ATD), System Development and Demonstration (SD&D), Low Rate Initial Production (LRIP), and Full-Rate Production (FRP) phase contracts for AARGM.

## PHASE III SUCCESS

The magnitude of this SBIR program can be demonstrated when you compare the initial SBIR study of \$50K to over \$1.5B in US Navy funded support according to the FY16 President's Budget.

## AGENCIES

DoD

## SNAPSHOT

Throughout its history, the company has grown from a small business of 5 employees to a part of Orbital ATK with approximately 12,000 employees in 20 states.

## ORBITAL ATK, INC.

9401 Corbin Ave,  
Northridge, CA 91324

[www.orbitalatk.com](http://www.orbitalatk.com)

Throughout its history, the company has grown from a small business of 5 employees to a part of Orbital ATK with approximately 12,000 employees in 20 states. The AARGM program is part of the Strike Weapons market area within the Orbital ATK Defense Systems Group.

Without the SBIR program, the U.S. Department of Defense and NATO's premier Destruction of Enemy Air Defense weapon system would not be fielded today, and the major business growth of SAT, Inc. and its subsequent acquisition by Orbital ATK, Inc. would not have occurred. In this case, the SBIR program was the seed corn that grew an entrepreneur's idea into a major defense acquisition program that is key to providing U.S. and NATO aircrews with the capability they require to protect themselves from enemy air defenses and a business that generates >1,000 jobs a year across multiple states. To date, the Advanced Anti-Radiation Guided Missile (AARGM) program has grown exponentially with the recent FY16 President's Budget supporting a USN Budget Activity document listing, under HARM Mod procurement, totaling \$1.56B through 2020. The magnitude of this SBIR program can be demonstrated when you compare the initial SBIR study of \$50K to over \$1.5B in US Navy funded support according to the FY16 President's Budget. This represents a revenue growth of over 30,000%. Furthermore, the AARGM evolved the High Speed Anti-Radiation Missile (HARM) capability to specifically engage surface threat radars "even in the event of radar shutdown." This requirement set in motion events that led to the most advanced Anti-Radiation guided missile in history.

Orbital ATK continually looks to pioneer new technologies for a new generation of weapons and defense systems that can be used to protect U.S. and allied troops engaged in ever-changing conflicts around the world. As such, Orbital ATK has supported the U.S. Navy's efforts to understand future year requirements. The Navy has recently implemented funding support in the FY16 President's Budget (PB16) for an Extended Range variant of AARGM referred to as "AARGM ER". This development effort is scheduled to commence in FY16 and field improved AARGM capability in the 2020+ timeframe. AARGM ER is currently listed in the USN budget document for R&D starting in FY16 and procurement starting in FY19 for a total of \$107M. It is anticipated that additional funding will be allocated for the program as it matures through the System Design & Development phase and again as it enters full rate production. AARGM provides "game changing" ability for aircrews to detect, identify, engage and destroy enemy air defenses and other time-critical, mobile targets – regardless of threat tactics and capabilities. AARGM's unique combat capability significantly increases the probability of successful engagements, minimizes the chance of collateral damage and eliminates the need to fly continuous suppression sorties throughout the duration of a conflict. AARGM is currently deployed and supporting operational requirements for the U.S. Navy and U.S. Marine Corps on the FA-18C/D Hornet, FA-18E/F Super Hornet and EA-18G Growler aircraft. AARGM is anticipated to achieve Initial Operational Capability on the Italian Air Force's Tornado ECR aircraft in 2016.

According to the company, one key aspect provided by SBIR rules is the protection of SAT's intellectual property (IP) and conveyance of these rights as part of the acquisition by Orbital ATK. With this protection, the value of the IP was not lost when the small business grew into a large business, in this case through an acquisition. Without these IP protections, the acquisition and subsequent program growth would not have been feasible. Orbital ATK has not only successfully executed and grown the original AARGM SBIR award into an ACAT 1C program, but has effectively worked with other small businesses and integrated its SBIR products into the AARGM production program (e.g. Quinstar MMW technologies and Composite Optics Inc. radome technologies). Through the SBIR program and other small business outreach programs, Orbital ATK ensures the best available technologies are integrated into AARGM and provides opportunities to small businesses. The U.S. Small Business Administration's recognition of Orbital ATK as one of the 2015 Tibbett's Award winners represents the culmination of years of dedicated work to develop and produce an entrepreneur's early concept and should serve as an aspiration to every SBIR Phase I program and small business seeking opportunities.

Orbital ATK has a long history of providing the United States and its military forces with high quality, affordable and innovative products. Orbital's products have earned a worldwide reputation for performance and reliability.



AARGM being launched from a Navy FA-18 aircraft.