



U.S. AIR FORCE



# AF CRP Success Stories

James A. Sweeney III  
Air Force CRP Manager  
Deputy Air Force SBIR PM



## CONNECTING

INDUSTRY AND ACADEMIA WITH U.S. AIR FORCE NEEDS

SMALL BUSINESS INNOVATION RESEARCH | SMALL BUSINESS TECHNOLOGY TRANSFER

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# MMA Design LLC



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# CLEANING UP THE SKIES

## WITHOUT IMPACTING SATELLITE PERFORMANCE

- **TOPIC TITLE: Low-Cost Deorbiting System**
- A Colorado-based small business is taking big steps to minimize a looming threat to valuable U.S. space assets.
- With the backing of the Air Force Small Business Innovation Research/Small Business Technology Transfer (SBIR/STTR) Program, MMA Design LLC created and successfully demonstrated a system to remove satellites from orbit that has attracted millions of dollars in investment from outside the SBIR program.
- Also known as a deorbit module, MMA Design's dragNET system can be added to an existing spacecraft late in the integration stage and is adaptable to various classes of vehicles.







# MMA Design LLC

**SBIR COMPANY NAME:**

MMA Design LLC  
Boulder, CO

**TOPIC NUMBER:**

AF083-198

**TECHNICAL PROJECT OFFICE:**

AFRL Space Vehicles  
Directorate  
Kirtland AF

**CONTRACT NUMBER:**

FA9453-10-C-0033  
B, NM



**2016 TIBBETTS AWARD WINNER!!!!**



# Composite Support & Solutions Inc.





# MATERIALS INNOVATION

## EXPECTED TO BOOST MISSION, ENHANCE PARTNERSHIPS AND SAVE MONEY

- Officials at Hanscom Air Force Base in Massachusetts faced a major setback in a key mission.
- The Hanscom Collaboration and Innovation Center – charged with advancing cyber technology and enhancing critical public safety partnerships among Federal, State and Local agencies - requires an elevated and unobstructed path between communication systems.
- Also known as radio line-of-sight, that existing path was in jeopardy as obstructions, roof damage and weight issues during heavy snowstorms would soon eliminate the option of mounting antennae on the center's roof.



# Composite Support & Solutions Inc.

**SBIR COMPANY NAME:**

Composite Support & Solutions Inc.  
San Pedro, CA

**TOPIC NUMBER:**

AF04-267

**TECHNICAL PROJECT OFFICE:**

AFRL Materials and Manufacturing Directorate,  
Wright-Patterson,  
AFB, OH

**CONTRACT NUMBER:**

FA8650-15-C-5604



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# PC Krause and Associates Inc.







# INDIANA COMPANY GIVES LIFT

## AIRCRAFT POWER AND PROPULSION SYSTEMS

### **TOPIC TITLE: Modular Motor Drive with Programming and Configuration Tools for the Development of Small Aircraft Electric Power and Propulsion Systems**

- Newly improved motor control technology could provide a significant boost to the performance of remotely piloted aircraft.
- With support from the Air Force Small Business Innovation Research/Small Business Technology Transfer (SBIR/STTR) Program, Indiana-based PC Krause and Associates Inc. has developed a system that may be capable of meeting a wide range of small aircraft electrical power and propulsion system needs.



# PC Krause and Associates Inc.

## **SBIR COMPANY NAME:**

PC Krause and Associates Inc.  
West Lafayette, IN

## **CONTRACT NUMBER:**

FA8650-15-M-2604

## **TECHNICAL PROJECT OFFICE:**

AFRL Aerospace Systems Directorate  
Wright-Patterson AFB, OH



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# NEW CAPABILITY BRIDGES COMMUNICATION

## GAP ACROSS DIFFERENT SECURE NETWORKS

### **TOPIC TITLE: Information Sharing Between the Global Information Grid and the System Wide Information Management System**

- The U.S. and its coalition partners work closely together in the field, but those efforts are typically hindered by an inability to communicate across separately classified networks.
- With support from the Air Force Small Business Innovation Research/Small Business Technology Transfer (SBIR/STTR) Program and Air Force Research Laboratory's Rome Research Site, Virginia-based Trident Systems Inc. deployed a certified cross-domain voice and video capability in the field. The technology – known as V2CDS – is being touted as a first-of-its-kind, real-time voice and video bridge between different secure networks.





# Trident Systems Inc.

**SBIR COMPANY NAME:**

Trident Systems Inc.  
Fairfax, VA

**TOPIC NUMBER:**

AF081-028

**TECHNICAL PROJECT OFFICE:**

AFRL Information Directorate  
Rome, NY

**CONTRACT NUMBER:**

FA8750-14-C-0277