

# LOAD-BEARING AND CONFORMAL ANTENNAS

## Advanced Apertures and Antenna Solutions

Mission specific frequencies or lower size, weight and power needs, either way, we have you covered. Our custom conformal antenna designs notably unnoticed and without functionality loss.

### CONFORMAL ARRAYS: CHANGING THE WAY YOU LOOK AND SEE

L3Harris provides conformal and loadbearing conformal antenna systems.

Our proprietary conformal antennas reduce weight, installation complexity and offer greater potential for integration into airborne platforms without drag-inducing antenna blisters. Our unique designs also reduce test and certification costs by minimizing impact on aerodynamic structures. Our discreet conformal antennas have been built in a wide variety of applications and are currently in use on military platforms.

### NEED-TO-SOLUTION CUSTOM QUICK-REACTION ANTENNAS

L3Harris provides a complete in-house need-to-solution antenna design, fabrication and performance validation capability that can be fielded within weeks to months depending upon complexity.

### CHARACTERISTICS

- Replaces OEM load-bearing structures with form, fit and function
- Retains equivalent structural integrity as an unmodified OEM structure
- > Reduces weight and drag, thus improving performance and endurance
- > Allows for flexible mounting locations such as winglets, landing gear doors, window inserts and body fairings





Discreet conformal arrays fabricated to meet unique mission requirements



### RAPID REPAIR AND RETURN OF OEM ANTENNAS AND ASSOCIATED EQUIPMENT

L3Harris has advanced composite prototyping shops and test ranges to support the prototyping and characterization of a wide variety of antenna systems. Our far-field, near-field and radome test ranges allow rapid response to customers with quick-reaction needs by providing comprehensive RF characterization.

### **CUSTOMERS**

- > U.S. military
- > U.S. Government agencies
- > Other select industry customers



### CAPABILITIES

- > Quick-reaction capabilities: designing, prototyping, repairing and manufacturing; most products delivered in fewer than 60 days
- > Full life-cycle support with more than 100 combined years of engineering expertise
- > Anechoic chambers and outdoor ranges operating from 20 MHz to 50 GHz
- > Analysis tools RF, installed performance, thermal, airflow, static and dynamic load
- > FAA and military airworthiness certification for aircraft antenna installations
- > Temperature and humidity testing; DO-160 environmental qualification
- > Material strength testing up to 10,000 lb.
- > Rapid 3-D, CNC and composite material prototyping and manufacturing
- > Circuit board mill and laser prototyping
- > In-house or on-location high-end FAROTM arm 3-D scanning

### LBCA Sell Sheet 2019 RevA

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L3Harris Technologies is an agile global aerospace and defense technology innovator, delivering end-to-end solutions that meet customers' mission-critical needs. The company provides advanced defense and commercial technologies across air, land, sea, space and cyber domains.



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