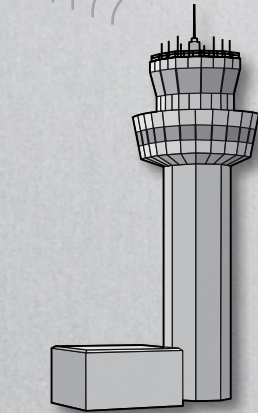
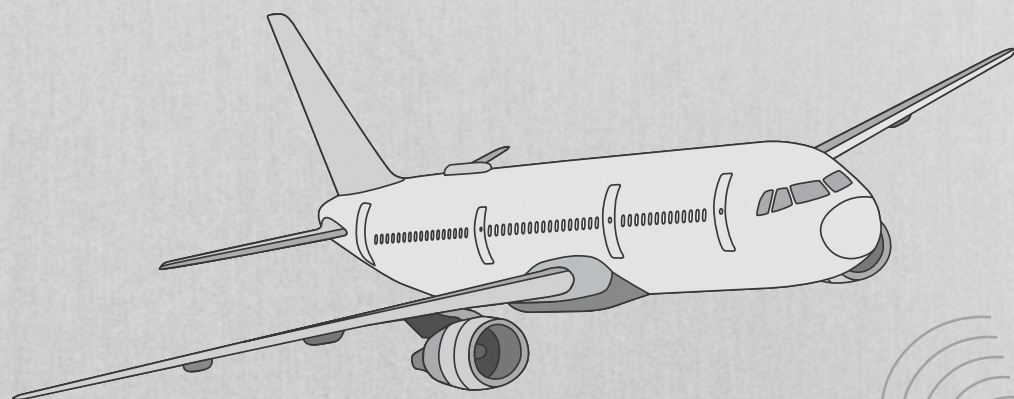
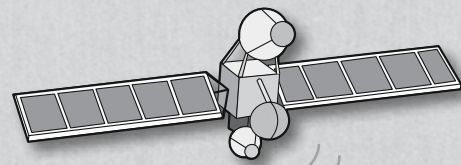
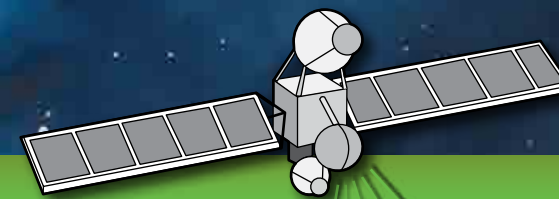


# STREAMLINED SATCOM INTEGRATION



**CARLISLE**  
INTERCONNECT TECHNOLOGIES



## TECHNICAL PUBLICATIONS & SUSTAINING

- » ATA 100 and ATA iSpec 2200 / S1000D
  - Component Maintenance Manuals (CMM)
  - Illustrated Parts Catalog (IPC)
  - Instructions for Continued Airworthiness (ICA)
  - Structural Repair Manual (SRM)
  - Wire Diagram Manual (WDM)
  - Flight Manual (FM)

## STATIC STRUCTURAL TESTING

- » Custom fixtures
- » Hydraulic loading
- » Automated data collection

## DYNAMIC STRUCTURAL TESTING

- » 8,000 lb-force (35 kN) vibration test system
- » Full range of vibration tests supported

## OTHER IN-HOUSE TESTING

- » Air Flow, Distribution, Leakage and Cooling
- » Acoustic Noise Generation
- » Smoke Containment and Smoke Detection
- » Mechanical Reliability and Endurance
- » Electrical Interconnect and Signature
- » Hi Pot, Insulation Resistance and Bonding

## MODELING & DESIGN

- » Pro/Engineer Wildfire
- » Routed Systems Designer
- » AutoCAD
- » CATIA
- » Solidworks

## SIMULATION

- » Finite Element Analysis
  - Mechanical
  - Algor MES
- » Computational Fluid Dynamics
  - FloEFD

## PART MANUFACTURING APPROVAL (PMA)

- » FAA PMA Facility
- » EASA EPA Facility

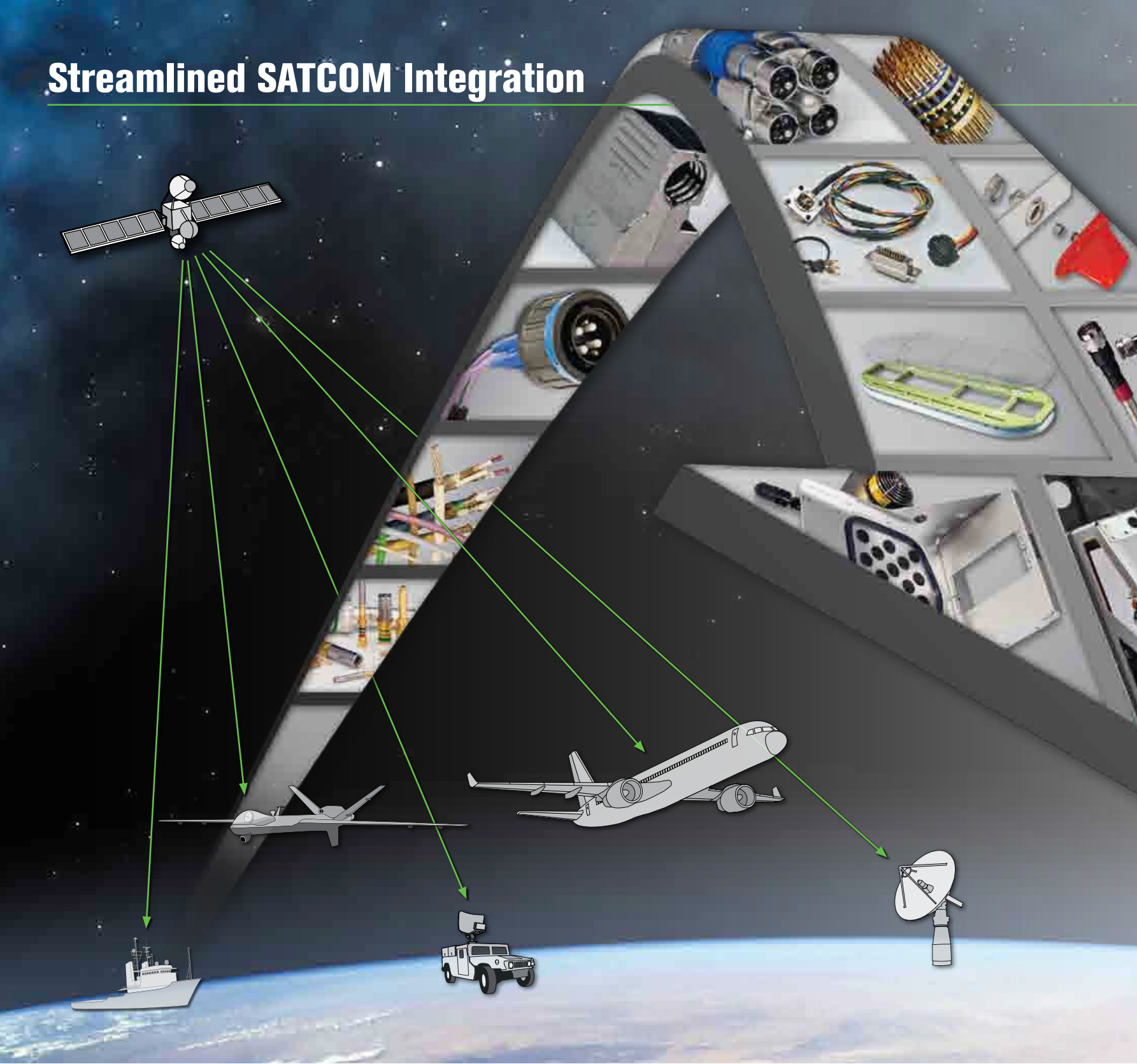
## IN-HOUSE FAA CERTIFICATION SUPPORT

- » Designated Engineering Representatives (DER)
  - Electrical Systems and Equipment
  - Mechanical Systems and Equipment
- » Designated Airworthiness Representatives (DAR)
- » Designated Manufacturing Inspection Representatives (DMIR)

## IN-HOUSE ENGINEERING

- |  |  |   |
|--|--|---|
| <ul style="list-style-type: none"> <li>» Acceptance Test Plan (ATP)</li> <li>» Acceptance Test Report (ATR)</li> <li>» Acoustic Noise Emission Test Plan</li> <li>» Acoustic Noise Emission Test Report</li> <li>» Aerodynamic Analysis</li> <li>» Aerodynamic Instability Analysis</li> <li>» Air Leakage Test Plan</li> <li>» Air Leakage Test Report</li> <li>» Aircraft Flight Manual (AFM) or Supplement</li> <li>» Aircraft Maintenance Manual (AMM) or Supplement</li> <li>» Avionics Systems Analysis</li> <li>» Beacon Light Evaluation</li> <li>» Bird Strike Trajectory Analysis</li> <li>» Compliance Report (FAR)</li> <li>» Compliance Report (Technical Specification) or Supplement</li> <li>» Component Maintenance Manual (CMM) or Supplement</li> <li>» Cooling Test Plan (Thermal Stability Appraisal)</li> <li>» Cooling Test Report (Thermal Stability Appraisal)</li> <li>» Damage Tolerance Assessment (DTA)</li> <li>» Data List (Master or Supplemental)</li> <li>» Declaration of Design Performance (DDP)</li> <li>» Decompression or Overpressure Burst Test Plan</li> <li>» Decompression or Overpressure Burst Test Report</li> <li>» Differences Summary Document</li> </ul> | <ul style="list-style-type: none"> <li>» Electrical Load Analysis</li> <li>» Electromagnetic Interference (EMI) Immunity Testing</li> <li>» Electromagnetic Interference (EMI) Test Plan</li> <li>» Electromagnetic Interference (EMI) Test Report</li> <li>» Engineering Order (EO)</li> <li>» Environmental Test Plan</li> <li>» Environmental Test Report</li> <li>» Failure Modes and Effects Analysis (FMEA)</li> <li>» Fire Penetration Test Plan</li> <li>» Fire Properties Assessment or Fire Properties Test Report</li> <li>» Fire Properties Test Plan</li> <li>» Flight Test Procedure</li> <li>» Ground Test Procedure</li> <li>» Grounding and Bonding Report</li> <li>» Functional Hazard Analysis</li> <li>» Heat Release Test Plan</li> <li>» Icing Analysis</li> <li>» Illustrated Parts List (IPL) or Supplement</li> <li>» Instructions for Continued Airworthiness (ICA)</li> <li>» Instructions for Continued Airworthiness EWIS</li> <li>» Interface Connectors List</li> <li>» Interface Loads Analysis</li> <li>» Materials and Usage Summary</li> <li>» Product Specification</li> <li>» Project Specific Certification Plan (PSCP)</li> </ul> | <ul style="list-style-type: none"> <li>» Qualification Test Plan (QTP)</li> <li>» Qualification Test Report (QTR)</li> <li>» Reliability Analysis</li> <li>» Service Bulletin</li> <li>» Smoke Containment Test Plan</li> <li>» Smoke Containment Test Report</li> <li>» Smoke Detection Test Plan</li> <li>» Smoke Detection Test Report</li> <li>» Static Test Plan</li> <li>» Structural Comparative Analysis Report</li> <li>» Structural Repair Manual (SRM) or Supplement</li> <li>» Structural Substantiation Plan</li> <li>» Structural Substantiation Report</li> <li>» Structural Substantiation Summary</li> <li>» Sway Space Analysis</li> <li>» System Safety Assessment (SSA)</li> <li>» Ultimate Strength Analysis (USA)</li> <li>» Ventilation Air Flow Analysis</li> <li>» Ventilation Test Plan</li> <li>» Ventilation Test Report</li> <li>» Vibration and/or Shock Test Plan</li> <li>» Vibration and/or Shock Test Report</li> <li>» Weight &amp; Balance Report</li> <li>» Weight Progress Report</li> <li>» Windmilling Analysis</li> <li>» Windmilling Test Plan</li> <li>» Windmilling Test Report</li> <li>» Wiring Diagram Manual (WDM) or Supplement</li> </ul> |
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# Streamlined SATCOM Integration



## Specialty Connectors

- » In-house design capabilities for custom interconnect solutions
- » In-house testing and qualification
- » Custom designs to meet critical requirements

## FlightGear™ Blind Mate Connectors

- » Convert antennas into "Plug and Play"
- » Fast antenna removal and maintenance

## Avionics Assemblies

- » Ease of installation (smaller, lighter and more flexible)
- » Built to print

## Antenna Mounts

- » In-house capability for design, mounting, certification for SATCOM antennas
- » Multiple approved STCs

## Trays

- » Lightweight trays that are 20% lighter than standard trays
- » ARINC 404A and 600 trays
- » Custom trays
- » Military Style and Advanced Thumbscrew Hold-Downs

## Engineering Services

- » In-house design and testing capabilities
- » STC certification and management

## Integrated Racks

- » Fully integrated racks and monuments with true "Plug and Play"
- » Engineering support from design to installation



## Contacts

- » Over 400 QPL approvals
- » Full line of AS39029, AECMA, EN, BACC, ESC and BAN

## Backshells

- » Compact and lightweight backshells in standard sizes
- » Special mounting features for mechanical stability

## Filtered Connectors

- » Filtered/TVS for maximum EMI protection
- » Low profile designs for space and weight savings

## RF Cable Assemblies

- » Full range of low loss coaxial cables from DC to 40GHz
- » Extensive connector product line (N, TNC, BNC, SMA, Push-On, ARINC 404 and 600)
- » Termination with standard tooling
- » Low PIM RF assemblies
- » Radiating leaky feeders

## LITEflight® Fiber Optic Assemblies

- » Lower loss, tighter bend radius and improved thermal stability
- » LITEflight® HD offers multichannel fiber in the smallest package

## NETflight® High Speed Ethernet

- » Flight proven design
- » High Speed transmission
- » Low smoke and flame generation