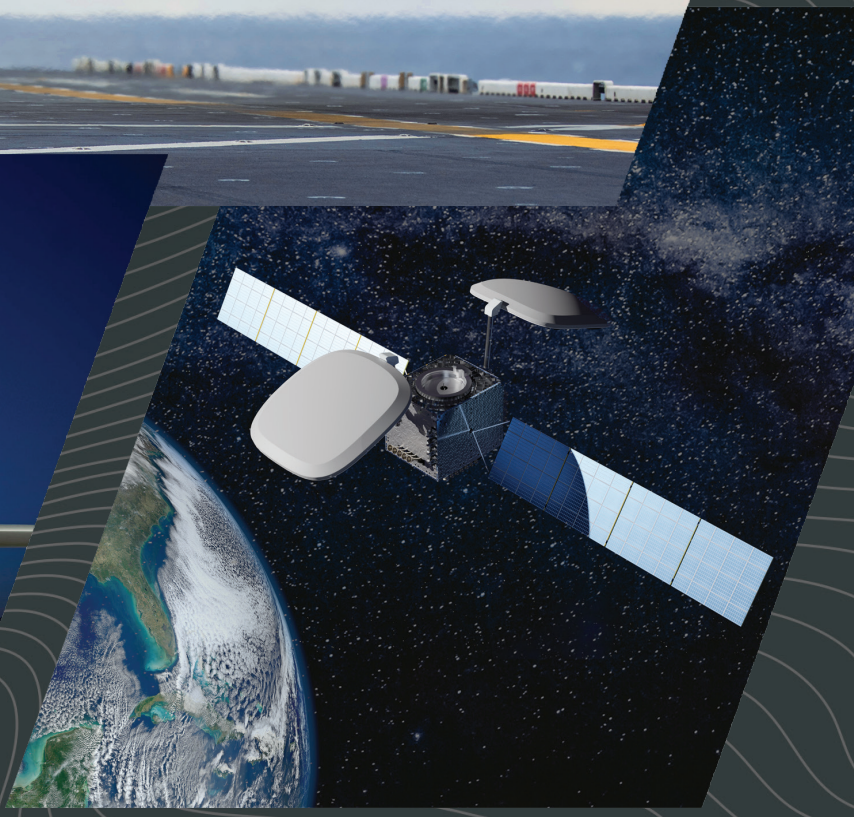
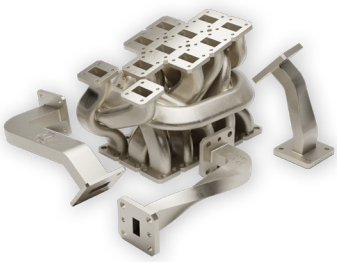
CAES PIONEERING ADVANCED ELECTRONICS

Additive Manufacturing/3D Printing for Critical Aerospace and Defense Missions



Swissto12

Unleash the Possibilities in Your Aerospace and Defense System Designs

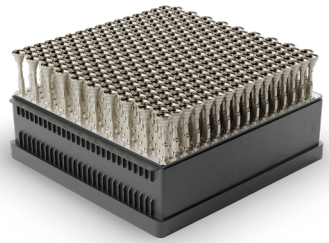


Complex aerospace and defense system design and meeting size, weight, power and cost (SWaP-C) challenges have now become a great deal easier.

By eliminating the need to assemble RF systems with hundreds of components and an abundance of interconnects, additive manufacturing greatly simplifies the development process and provides manufacturers with utmost flexibility as well as time to market and bill of material savings. What was once only imagined is now a reality thanks to a partnership between CAES, the leading provider of RF technologies and related mission-critical electronic solutions, and SWISSto12, the leading provider of 3D printed technology for RF applications in the aerospace and defense industry.

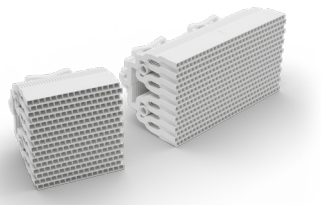
CAES and SWISSto12 3D printing/additive manufacturing capabilities allow system developers to achieve SWaP requirements and to break free from certain traditional manufacturing limitations and space constraints, thereby enabling products to be more complex, more lightweight, with more RF features for extra performance. Furthermore, with the speed of use and agility of additive manufacturing, prototyping becomes easier as developers can print designs, test and then adapt them faster than traditional mechanical workflows.

Partnership of Two Pioneers: CAES and SWISSto12



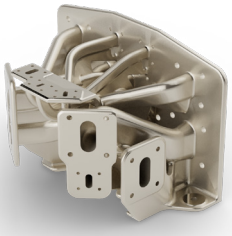
CAES is the largest provider of analog and radiation hardened technology for the United States aerospace and defense industry. SWISSto12's patented 3D printing technologies and associated product designs uniquely deliver lightweight, compact, highly performing and competitive RF products and sub-systems with a great deal of commercial success throughout Europe and Israel. Together, the companies have a combined spaceflight heritage spanning over 70 years and unparalleled waveguide, antenna, mixed signal and radiation hardened technology expertise, including support for Ka, Ku and Q-bands.

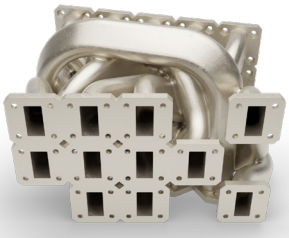
The CAES/SWISSto12 alliance grants CAES exclusive license to SWISSto12's patents, trade secrets, and product designs for the US market. CAES and SWISSto12 will work together with US customers on new designs to meet the high performance requirements of future missions.

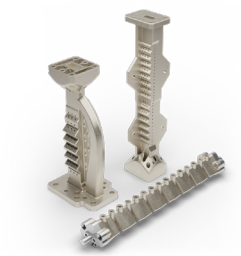


Additive Manufacturing for All of Your System Design Needs

- Sea, Land, Air and Satellite Communications
- Control and Telecommand
- Radar
- SIGINT (Signals Intelligence)
- Phased Array Antennas

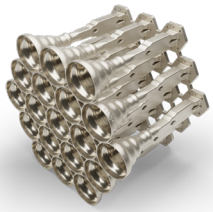




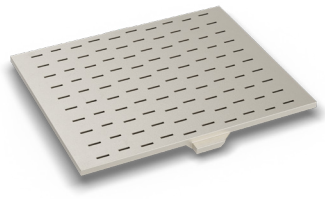


Reliability You Can Trust

The additive manufacturing process developed by SWISSto12 is complex and leverages unique and patented technology. For decades, CAES technology has pioneered the future and underpinned many of the world's most critical aerospace and defense missions. With this unmatched combination of skills and expertise, manufacturers can be assured that the CAES/SWISSto12 products are trustworthy, field-proven and can sustain the harshest environment possible.



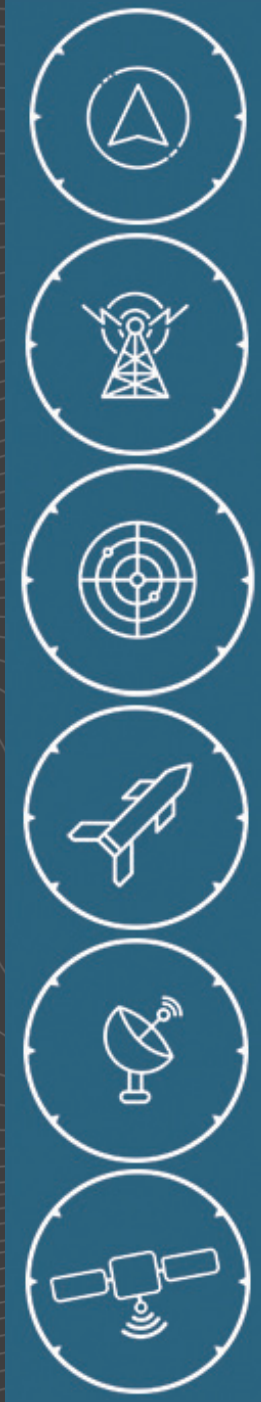
Our processes and products have undergone thorough qualification and testing processes to ensure that the materials, coating and paint that are applied can withstand maritime, airborne and space environmental constraints. Qualification results show uncompromised performance through mechanical, thermal, vacuum, humidity, salt fog and other tests to support demanding qualifications.



Available 3D Printed Solutions

Additive manufacturing techniques are being applied to CAES' extensive portfolio of waveguides, filters, diplexers, antennas and arrays, microwave and millimeter wave integrated assemblies for space, electronic warfare, radar and communications applications. Please contact CAES today for ordering and additional information.

The CAES and SWISSto12 alliance delivers groundbreaking, next-generation RF designs utilizing additive manufacturing techniques for the aerospace and defense industries.



We engineer solutions for the world's most critical missions.

CAES
PIONEERING ADVANCED ELECTRONICS

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