



An off-Earth manufacturing base for the spacefaring society.

Besxar Space Industries, Inc. (Besxar) is the exoindustrial company building advanced semiconductor materials. Its reusable, autonomous manufacturing units ('Fabships') are designed to use the space environment itself as a production input, growing the compound semiconductor substrates, epitaxial layers, and thin films that are expensive, scarce, and defect prone on Earth. These materials underpin AI data centers, power electronics, radar and satellite communications, quantum systems, nuclear technologies, and defense applications.

On Earth, compound semiconductor fabrication is a fight against contamination, and decades of refining what is possible inside terrestrial fabs has run into a physics wall. In orbit, ultra high vacuum is a native process environment rather than something a factory must build and maintain at enormous cost. Besxar is building toward a repeatable, autonomous manufacturing process purpose-built for space: Fabships launch stacked aboard a space transport vehicle, initiate autonomously once they reach vacuum, deposit materials on substrates layer by layer, then secure that cargo for reentry and recovery before being refurbished and reflowed. Each mission is intended to return both finished material and the flight data that sharpens the next. The company is proving out that cycle flight by flight.

Besxar was founded in 2023 by Ashley Pilipiszyn and is headquartered in the historic Boilermaker Building in Washington, D.C., a former naval industrial facility that produced boilers, gun mount shields, barrel plates for torpedo tubes, and other critical components for Navy ships during both World Wars.

Besxar is committed to rebuilding a secure and resilient domestic semiconductor base, ensuring the United States and its allies lead in the technologies that define the future.

For media inquiries or interview requests, please email press@besxar.com. For general questions or information, please contact info@besxar.com.