

by Monica Cardenas

Intense R&D keeps BAI on Cutting Edge of Unmanned Aircraft Systems

CM: What is the nature of your business?

RB: BAI's core business is in the design, manufacture, and integration of unmanned aircraft systems (UAS). BAI offers a complete line of unmanned vehicles and support equipment, and is also able to provide individual components for an UAS.

CM: How many employees do you have?

RB: 75 employees involved in design, development, manufacturing, engineering, integration, flight testing, administration, purchasing, marketing, sales, and finance.

CM: What is your company's background?

RB: BAI was started in Rockville, MD, in 1985, as an airframe manufacturing company. In 1991, BAI was moved to its current facility in Easton, MD, and has evolved into a single source for complete unmanned aircraft systems. In 2004, BAI was acquired by L-3 Communications Corporation, the nation's sixth-largest U.S. defense contractor.

CM: How has it evolved from its beginnings?

RB: BAI was started solely as an airframe manufacturer, and has developed into a complete UAS manufacturer. BAI has not just produced over 1,100 unmanned vehicles; it has expanded its product line to include payloads, launchers, data links, autopilots, ground control stations (GCS), remote video terminals (RVT), and flight services. Through its refined manufacturing processes, BAI is now able to manufacture individual parts or mass quantities, with the option of customizing a product for its customer on short notice. BAI specializes in composite manufacturing, and produces all of its products in-house.

CM: How did you get started in the industry?

RB: BAI was started by three individuals who had developed a new technology for manufacturing airframes. This process of using composite material lightened the weight of the airframe, and allowed for customized payloads to be integrated with the airframe. When BAI's former owner and current president moved the company, BAI began to design and develop more subsystems, until reaching its current peak of offering complete systems and flight services.

CM: What obstacles does your company face today in the regulatory or technical arenas?

RB: The FAA regulates airspace, and receiving approval to fly within that airspace has been a cumbersome and complex process. Commercial applications may require airspace approval, but this is still an on-going task.



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CM: What are your marketing efforts?

RB: BAI focuses on UAS-specific trade shows and literature, including the Association for Unmanned Vehicle Systems International (AUVSI) and the Shephard Group. Both associations provide domestic and international marketing opportunities, and

provide the largest industry base at trade shows. BAI has recently commenced marketing in the international market, but this is also a developing area. As a division of L-3 Communications Corp., BAI has access to a larger trade show base, and has expanded its marketing presence to the U.S. military and their main trade shows.

CM: What development or research would you like to see happen to improve the industry?

RB: FAA regulations need to be made clear, and companies must be made aware of the progress that is being made. Also, UAS technology improves on a daily basis, and the exciting part of this industry is research and development. Certain programs need collaboration from different companies, and the development of written standards across the board would be welcome.

CM: Where do you see your business in five years?

RB: BAI has positioned itself to be an able provider of complete unmanned aircraft systems, from design through deployment. As technology improves, BAI intends to continue its role as a leading manufacturer of unmanned vehicles and support equipment. With over 20 years of composite manufacturing experience, BAI is now able to offer the necessary support for these products, and provides flight services around the globe. The market for flight services is also growing, and BAI foresees an integral role in that arena.

CM: How are you staying on the cutting edge?

RB: BAI's engineering department is constantly researching ways to improve its products, whether it be with a different material, a new process, a modified version of a current product, an added feature to its plane, or the development of an entirely new product. BAI is in constant contact with its customers, and is in-tune to their needs. The flexibility of a company of our size allows BAI to constantly update our products, and to adapt to meet the customer's requirements. **CM**

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