Already well known for composite components, AAR is considering expanding its offerings and expertise in that market.

Having changed its name to AAR Composites (from AAR Aerostructures and Interiors) about 18 months ago to reflect its growth as a manufacturer of composite parts and structures for aerospace, the company (Booth 3178) is working on three fronts to strengthen its flat-panel product line for business aviation.

Citing his company's advantages in production lead time and pricing, Victor Ho, v-p engineering for AAR Composites, told AIN that the company is “looking to further shorten lead time.” In a closely related second initiative, “We’re working on [increasing] the level of support for the product line,” said Ho. At the same time, a key third initiative is that “we’re working to increase the [product line’s] burn [resistance] and mechanical strength.”

Having begun life in the 1980s as an independent composite-manufacturing company named ATR International, which was purchased by AAR in 1997, AAR Composites has a considerable presence in commercial, business, and military aircraft manufacturing. According to Ho, it designed the interiors for all the single-aisle Boeing BBJ models and in 2003-2004 developed a strong relationship with Sikorsky, designing the interior of the VIP version of the S-92A. AAR Composites now supplies interiors for every S-92A variant, he said.
Additionally, said Dan Fitzpatrick, general manager, AAR Composites made part of the Fairchild Republic A-10 Thunderbolt II wing for the A-10 Wing Replacement Program (which was awarded to Boeing in 2006) and makes products for commercial aircraft programs, particularly for regional aircraft. One such contract is for the flap track fairings on the Airbus A220, which was known as the Bombardier C Series until Airbus acquired a majority stake in the program in summer 2018.

The company also has a strong presence in the business aviation sector. According to Ho, it sells flat-panel products to Cessna and Bombardier for some of their business jets (including Bombardier’s Global 5000 and 6000) and also to “a lot of [third-party] completion centers.” AAR Composites also performs work for Gulfstream Aerospace, according to Fitzpatrick. Interiors and seats specialist B/E Aerospace, which is involved in the business aviation market as well as in commercial aviation, “is a top customer in [the bizav] area as well,” said Ho.

AAR Composites has also recently developed a business relationship with FlightSafety International. For FSI, AAR Composites manufactures the molded layup carbon-fiber composite “petals and skins” that together form the external shell of each full-flight simulator FSI makes for Gulfstream Aerospace’s business jets, said Fitzpatrick.

**STRATEGIC DEVELOPMENT**

Strengthening AAR Composites’ bizav flat-panel product line is only one aspect of a larger strategic impetus to enhance its competitive position as a provider of flat-panel and structural composite parts to aerospace OEMs, MRO facilities, and completion centers, according to Fitzpatrick. As part of this process, AAR Composites is working to qualify certain of its flat-panel products so it can supply them to various OEMs in the commercial, business, and military aviation sectors, as well as providers of aviation support services such as MROs. The company expects to complete the flat-panel qualification effort by the middle of 2019. “AAR Composites is working closely with OEMs to qualify products for commercial[aviation] applications,” noted Ho.

In another, wider strategic move, parent AAR started working in June to more horizontally integrate its composites, MRO services, and engineering services businesses, according to Fitzpatrick. AAR launched the effort so that all three units can make use of each other’s products and services “as applicable,” encouraging a higher degree of internal rather than external sourcing. The intention is to make each of the three business units as competitive for AAR’s own internal purchasing requirements as are its existing external suppliers.

To that end, along with the company’s component repair and landing gear services divisions, AAR’s composites, MRO services, and engineering services units were brought earlier this year under the oversight of Brian Sartain, who AAR recently appointed to the newly created position of senior v-p for repair and engineering services. AAR’s move to make its business divisions more horizontally integrated may already be paying off: on September 5, AAR Composites received a proposal from AAR MRO Services to supply a range of composite
parts, some made from carbon-fiber composite material and others from compression-molded fiberglass, according to Fitzpatrick.

AAR Composites plans to grow its business in the medium term and is considering adding new composite-manufacturing capabilities. As of mid-September it was bidding on “a pipeline of $200 million to $300 million” in manufacturing contracts, according to Fitzpatrick.

He said that if AAR Composites were to win a substantial amount of that business, “the skill-set and the complexity of the work would probably take us a level or two above where we are” now in terms of its manufacturing capabilities. “Our technology insertions are our skill-set capabilities, and what we provide will be more complex than today,” said Fitzpatrick.