

ACJ Completion Highlights Amac's Strengths

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Carbon fiber figures prominently in the interior design of this ACJ319 by Amac Aerospace. Completed for an undisclosed Far East customer, the airplane will enter service early next month.

Amac Aerospace is about to deliver an Airbus Corporate Jet (ACJ) completed over the past 12 months at its Basel, Switzerland, headquarters. The aircraft is expected to enter service in early June for an undisclosed customer based in the Far East.

The ACJ was delivered green in November 2013 and, after conducting standard preliminary maintenance, Amac (Booth H115) started by painting the airframe. This was finished by April 2014, at which point the engineering phase of the completion began.

The customer hired the Paris-based Alberto Pinto group to design the ACJ's interior. The Amac team received the final design package three months after the completions contract was signed, at which point it analyzed it from an engineering perspective and made any necessary adjustments, which it incorporated into the so-called X-ref document, which covers factors such as the positioning of all fixed structures and seat tracks, as well as water and electricity supplies.

"The clearance process went very smoothly and we produced two mock-ups to help the owner to see how the design would work," explained Waleed Muhiddin, Amac's vice president for strategic operations and business development.

At the front of the ACJ is the main entrance, a crew rest area and a bathroom. Beyond a private hallway, there is a master bedroom with en-suite bathroom and storage space for clothing. The next

section of the cabin is a main lounge, with a side-facing divan and separate seats facing each other, followed by a club seating arrangement suitable for dining and a private lounge with two divans that can drop down to make beds. At the rear there is more storage space and another lavatory.

Custom Control Concepts (Booth C017) is the main supplier for the aircraft's inflight entertainment and communications systems. These include wireless audio-visual on-demand streaming capability that can be controlled from personal electronic devices, along with three 42-inch monitors.

The ACJ's owner specified a preference for using carbon fiber for all interior surfaces and structures, and Amac's research and development team experimented to work out how to make the most efficient use of the material. All the seats have carbon fiber shells around them.

The design features a lot of neutral earth-tone colors and *feng shui* elements. The walls were finished with fabrics and the seats, which can fold out flat, and have specially-stitched leathers with quilted top surfaces. The sidewalls are decorated with handcrafted marquetry prepared in Amac's own specialist workshops.

Throughout the cabin there is extensive use of metallic composite surfaces with black patina polishes. Varying textures enrich the overall appearance through the use of different leather finishes and rib-weave plastics.

"Our vendors have to be able to guarantee their materials, and that can be a problem for small producers as an interior should last around 10 years," explained Muhiddin. "Every aircraft we complete joins an elite group finished to our high standards."

The aircraft's high ceiling reduced the amount of space available for air conditioning ducts so Amac engineers had to work around this limitation. The cabin is fitted with CTT's humidification system. Cabin noise levels have been reduced to around 52- to 54-dB.

Meanwhile, Amac is in the final stages of completing a VIP Boeing 747 and it received its third 777 at the end of 2014—which will be completed for an undisclosed African customer—and another ACJ is also in the works.

The company is building fourth 78,363-sq-ft hangar in Basel which, when it opens towards the end of this year, will mainly be used for maintenance work. The expansion will increase total hangar space at the site by nearly 35 percent.

Amac holds more than 20 maintenance approvals from authorities around the world. Once it has completed a recruitment drive around the addition of the fourth hangar, the group expects to take total employment numbers beyond 800 people.

Often cabin refurbishment and upgrade work is combined with maintenance. For example, last month a Boeing BBJ3, owned by an undisclosed Middle East customer, arrived in Basel to undergo a partial cabin reconfiguration, including STC-level changes and new seating. At the same time, Amac

conducted a C-check on the aircraft to reduce overall downtime.

For another undisclosed Asian customer, Amac has been contracted to refurbish and upgrade an ACJ319. This will involve new carpets and a major modernization of the inflight entertainment and communications system. Similar work started on a 777-200 last month.

Turkey Takes Off

Last year, Amac's facility in Istanbul, Turkey, became a Dassault Falcon authorized service center. The site's main activity is the company's joint venture with Pilatus to sell and support its PC-12 single turboprop and new PC-24 light jet in the neighboring Middle East market.

In March, the Turkish civil aviation authority approved the facility to conduct line maintenance up to A-check levels for the Falcon 7X. Amac is looking to get European and U.S. Part 145 approval for the model by the fourth quarter of 2015. The Istanbul site already has EASA clearance to do C-checks on Falcon 900s and 2000s, and recently added Cayman Island approval to its portfolio.

Last week, Rockwell Collins appointed Amac's Turkey operation as an authorized dealer for its avionics products. In March, Honeywell also brought the facility into its dealer network.