

PREMIER AM PARTNERS SINCE 2014

PERFORMANCE. RELIABILITY. VALUE.

# How **FGF** Beat FDM and Enabled Agile Production of People Movers



## BACKGROUND

A global engineering firm recently unveiled a fleet of people movers for new Airport terminal programs. The “cabin” holds luggage and seats riders to and from their

gate. With serious time constraints, the JuggerBot 3D Tradesman Series™ P3-44 enabled the client to rapidly produce large, structural cabins in 42 sections.



(figure 1: GOAA Cabin in Orlando International Airport Terminal C)

**Facing major time and cost constraints, a global engineering services provider needed a miracle to deliver their autonomous people movers.**

Orlando International Airport's Terminal C is a hub of anxiety for travelers trying to meet departure times. This applied technology engineering firm, was contracted to find a solution for those stressing from gate to gate. The result, an autonomous cabin for the Greater Orlando Aviation Authority (GOAA).

## 8 Days. 42 Pieces. 400 Pounds.

With complex product development, costly manufacturing options & tight time commitments, JuggerBot 3D of Youngstown, Ohio was brought on to see if it was feasible to meet their project's needs. For the JuggerBot team it was time to get to work.

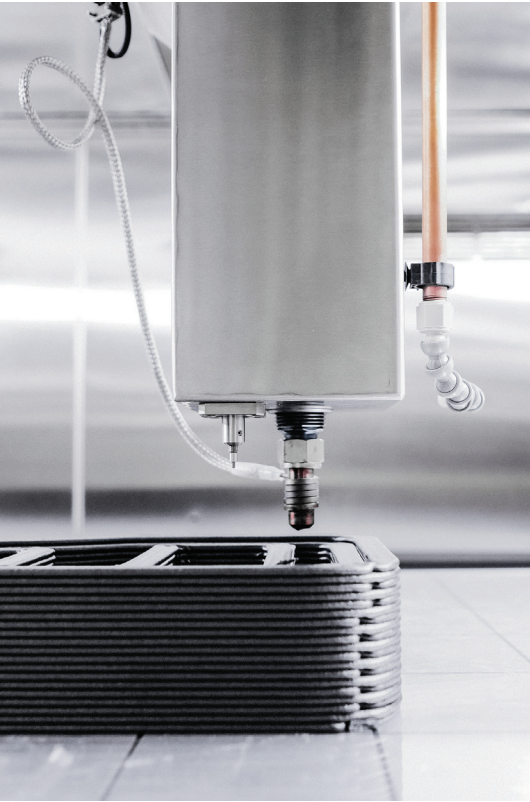
The Tradesman Series™ P3-44, a large-format FGF printer enabled rapid production of large, structural cabins in 42 sections that would later be bonded and machined together. Each cabin was printed over an eight-to-ten day span.



(figure 2: JuggerBot 3D Team assembling GOAA Cabin in their home office)

**"When our projects require big parts or rapid tooling, we trust JuggerBot's expertise for all of our large format printing needs"**

-Adam, Vice President of Engineering



## Results

JuggerBot met quota delivering six GOAA People Mover Cabins using a carbon fiber reinforced composite material and ultimately cut lead time by four months, the only way the customer requirement could be met. The utilization of FGF printing effectively generated a 60% reduction in cost (vs next-best option/FFF).

**4**

Month lead  
time reduction

**60%**

Cost reduction vs.  
next best alternative



(figure 3: assembled GOAA cabin in front of Tradesman Series™ P3-44)