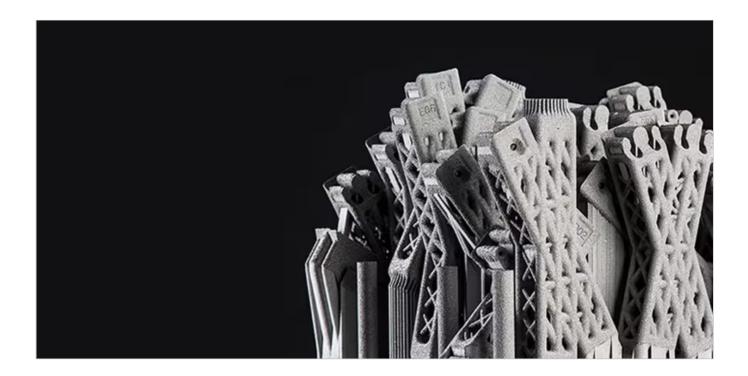
# Bionic Partition Project

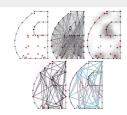


# Overview

Developed in collaboration with Airbus, Autodesk, and APWorks, the Bionic Partition is the world's largest metal 3D printed airplane component. The partition is a dividing wall between the seating area and the galley of a plane, and it is a challenging component to design because of requirements to include a cutout for emergency stretcher access and to hold a fold-down seat for cabin attendants. The new Bionic Partition—created through a pioneering combination of generative design, 3D printing, and advanced materials—is almost 50% lighter than current designs, and it is also stronger. This weight savings translates to fuel savings and carbon reduction. The final design illustrates custom "bio computation" developed by The Living, and it demonstrates an ultra-high-performance result beyond typical engineering rules of thumb. The Bionic Partition is currently

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# **Related Publications**



Nature-based Hybrid Computational Geometry System for Optimizing **Component Structure** 

Danil Nagy, <u>Dale Zhao</u>, David Benjamin (2017)

Design Modeling Symposium





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