- **Up to 40% weight savings**
- **Improved fatigue resistance**

NEW COMPOSITE MATERIALS

PROMOTE BIGGER FUEL SAVINGS, BETTER FATIGUE RESISTANCE IN AIRCRAFT

The Air Force and a small business partner are pushing the boundaries of high-temperature material production to cut fuel costs and boost the service life of aircraft.

Moraine, Ohio-based PROOF Research is working with Air Force Research Laboratory to further computationally derived materials, manufacturing and engineering solutions, which includes the development of high-temperature polymer matrix composites as a replacement for titanium.

Also known as PMCs, the advanced materials can trim the weight of some parts and systems in aircraft by as much as 40 percent - resulting in annual fuel savings of hundreds of dollars per kilogram of titanium replaced – while offering increased service life and improved fatigue resistance.

Proof Research
Moraine, Ohio

For full story click here:
http://www.wpafb.af.mil/Portals/60/documents/afrl/sbir/TRANSITION_New_Composite_Materials_for_Fuel_Savings_WEB.pdf

For video click here:
https://www.youtube.com/watch?v=LCpKXK5r2zY

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