



# Air Force Research Laboratory|AFRL

*Science and Technology for Tomorrow's Air and Space Force*

## **Materials and Manufacturing Directorate**

2977 Hobson Way

• Wright-Patterson Air Force Base, Ohio

• 45433-7746

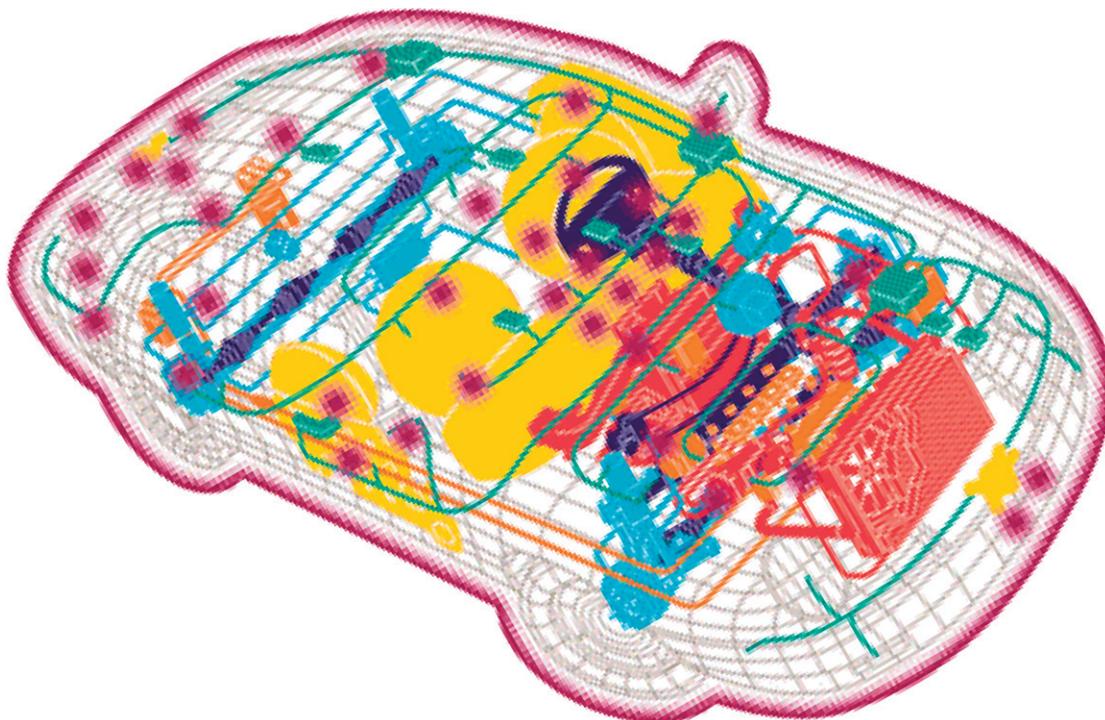
### **Brake-by-Wire**

Brake-by-Wire, a next generation braking system, will stop vehicles by electrical signals, rather than by hydraulic systems as used on most conventional brake systems today. The Air Force Research Laboratory and Delphi Automotive Systems signed a technical collaborative agreement to bring this new technology to the automotive industry.

The Brake-by-Wire technology is expected to offer increased safety and vehicle stability to consumers and it will provide benefits to automotive vehicle manufacturers who will be able to combine vehicle components into modular assemblies using cost effective manufacturing processes.

The Air Force has an extensive background in landing gear and fly-by-wire systems. Delphi will work to integrate Brake-by-Wire technologies into next generation vehicle handling and safety systems.

Introducing the technology to the commercial arena also benefits the Air Force by creating a demand for shared components, thus reducing the component cost to government and industry for their respective applications. The collaboration will also leverage investments in more electric aircraft and provide needed large-scale technology validation.



For more information on the Materials and Manufacturing Directorate  
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