

## CASE STUDY: Tough Enough for Armored Tanks

EOIR Technology was contracted to create a camera and mount for gun sights on M1 Abrams tanks and Bradley fighting vehicles for the Mississippi National Guard. EOIR's subcontractor's designs for the mount failed performance tests. EOIR found itself up against a tight budget and contract deadline with no deliverable solution.



**“The Dimension machine paid for itself in just two months, creating parts.”**

*– John Moulton*



Using Solid Edge® CAD software and a Dimension 3D Printer, EOIR was able to quickly evaluate models of alternative designs. Sturdy ABS parts generated by Dimension proved tough enough to test directly on the armored vehicles without having to go through a costly, time-consuming process of machining them in aircraft-grade aluminum.

*Camera mounts for the M1 tank and Bradley fighting vehicle were built in tough ABS directly from digital files using the Dimension 3D Printer.*

### **The Dimension Solution:**

Functional models built with ABS plastic from the Dimension 3D Printer proved so tough that EOIR manufactured the final mounts on the 3D printer itself. This not only saved time, it dramatically reduced part cost. Manufacturing costs for these components would have exceeded \$100,000. For less than \$40,000, EOIR acquired a CAD software package, Dimension 3D Printer, and ABS modeling materials, and it produced the 40 camera mounts internally.

EOIR Technology project manager John Moulton notes, *“If we had contracted with a separate machine shop to make these parts, not only would we not have made the schedule, but we wouldn't have a stay-behind piece of equipment that could continue to make money for us on future projects.”*



