

EMS Scans the MRAP

The new Mine Resistant Ambush Protected (MRAP) vehicles starting arriving in Iraq in 2007. These new vehicles offer much needed protection from IED's, gunfire and other explosive devices for the Marines. In June 2008, USA Today reported that roadside bomb attacks and fatalities were down almost 99% partially due to MRAPs. "They've taken hits, many, many hits that would have killed soldiers and Marines in unarmored Humvees," according to Adm. Michael Mullen, chairman of the Joint Chiefs of Staff.

The Problem

A major supplier of electronics equipment for the new MRAP vehicle needed 3D CAD information to be able to mount their antennas and other equipment on the MRAP vehicle. This included designing mounting brackets on all four corners of the vehicle. The supplier could not obtain the 3D CAD data so they needed someone to 3D scan an MRAP and provide them with a 3D CAD solid model.

The Solution

The supplier contacted EMS to be able to quickly travel on-site and 3D scan MRAP the vehicle. As the MRAP was being rushed into product to save soldiers lives every day counted.

EMS quickly went on-site and 3D scanned the MRAP vehicle with their Z Corp Z Scanner Z800 3D scanner. The ability to quickly scan all four corners and align the data was finished in one day. Back at EMS's office the work began to convert the 3D scan data into feature based solid models. The solid models would allow the supplier to accurately build mount brackets to fit the surfaces of the vehicle precisely.

The supplier was so impressed with the speed, ease of use and accuracy of the Z Corp 3D scanner they purchased their own Z800 3D Scanner from EMS. Today they continue to scan all types of military vehicles for their installation needs.

Conclusion

Many times 3D Scanning is the only option when 3D CAD data is not available. For suppliers to the MRAP vehicle they needed CAD data immediately and waiting for the CAD data was not an option. EMS scanned the MRAP in record time to help save soldiers lives.

For more information visit www.ems-usa.com



The new MRAP vehicle saves soldiers lives



3D scanning the rear of the MRAP



Finished 3D CAD feature base solid model of the front corner of the MRAP