



**RDECOM**



**TECHNOLOGY DRIVEN. WARFIGHTER FOCUSED.**

Tank Automotive Research, Development and Engineering Command (TARDEC) Overview

## Report Documentation Page

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- Purpose
- Mission and Vision
- Organization
- Organizational Relationships
- Geographic Benefits
- Technology Focus Areas
- Facilities
- Summary

To provide an introduction to the U.S. Army Tank Automotive Research, Development and Engineering Center's **(TARDEC)** programs, capabilities and facilities.



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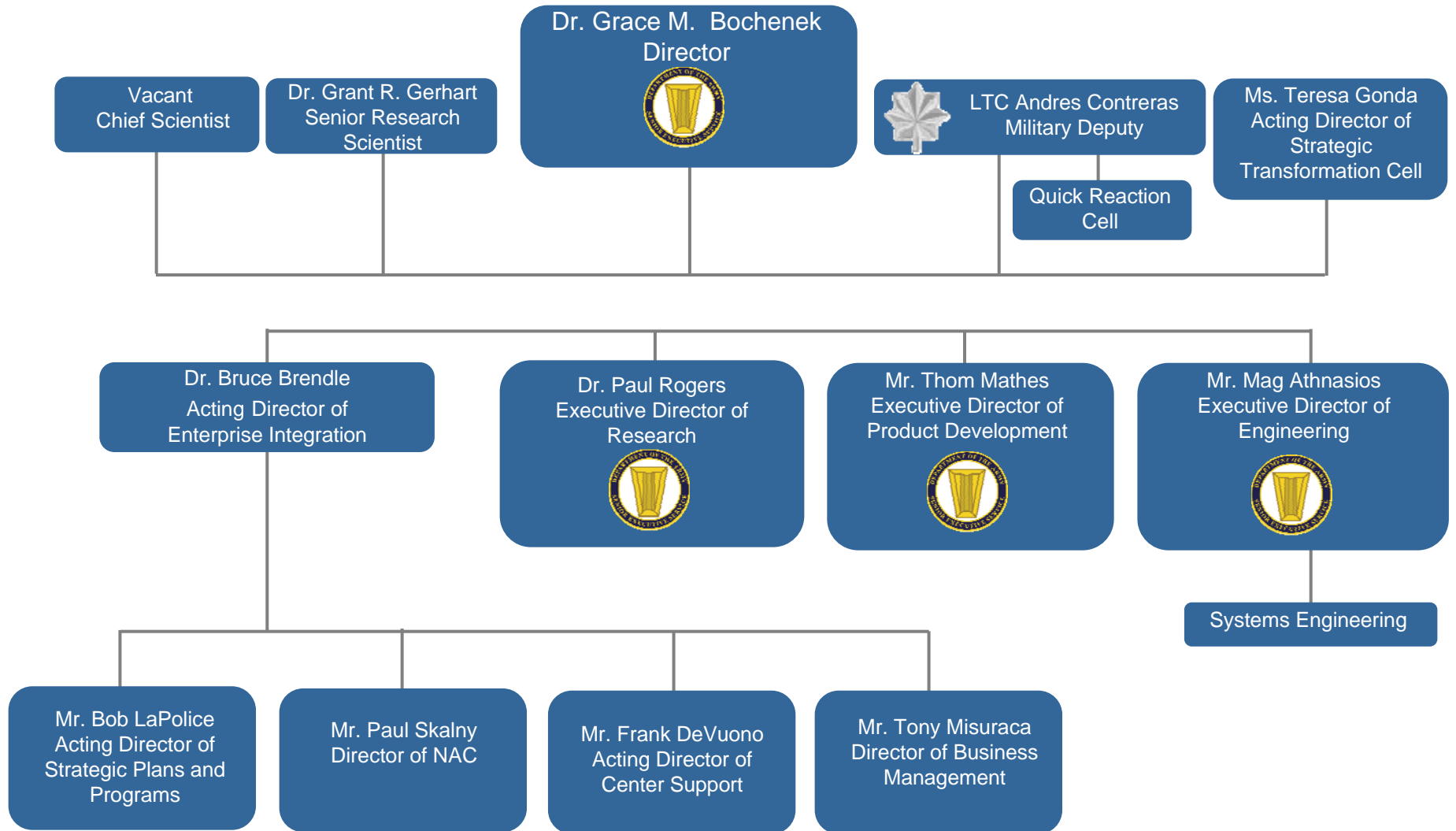
# Tank Automotive Research, Development & Engineering Center (TARDEC)

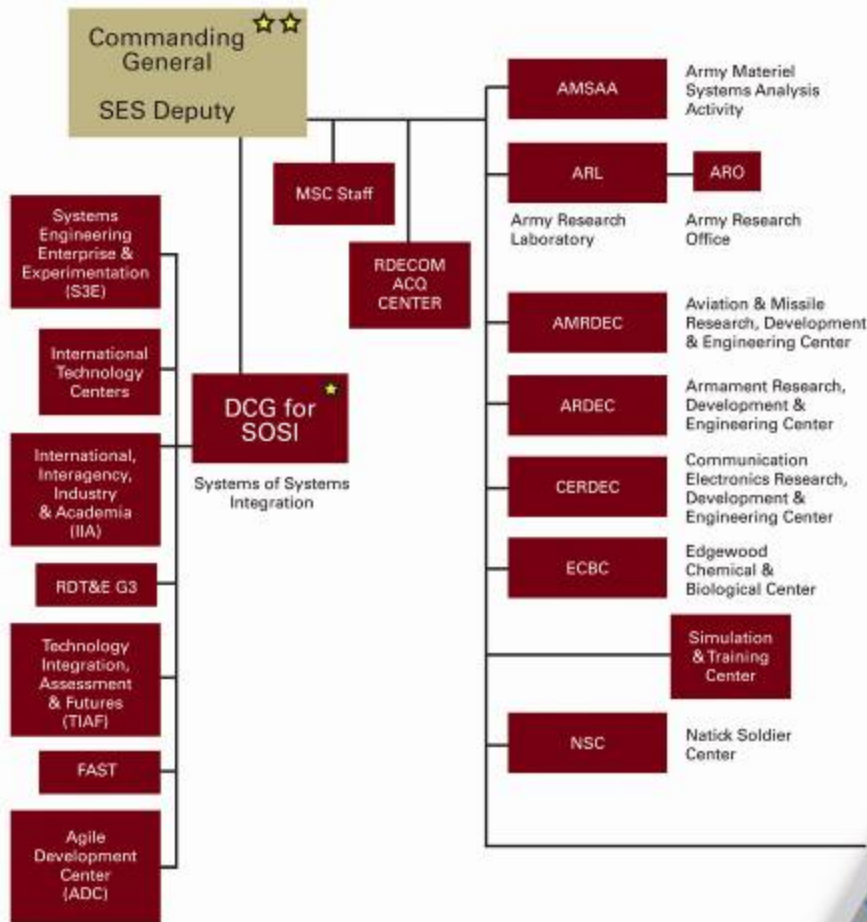


**MISSION:** TARDEC is a major element of RDECOM and partner in the TACOM Life Cycle Management Command. As a full life-cycle engineering support provider-of-first-choice for all DoD ground combat and combat support weapons and vehicle systems, TARDEC develops and integrates the right technology solutions to improve Current Force effectiveness and provide superior capabilities for the Future Force.

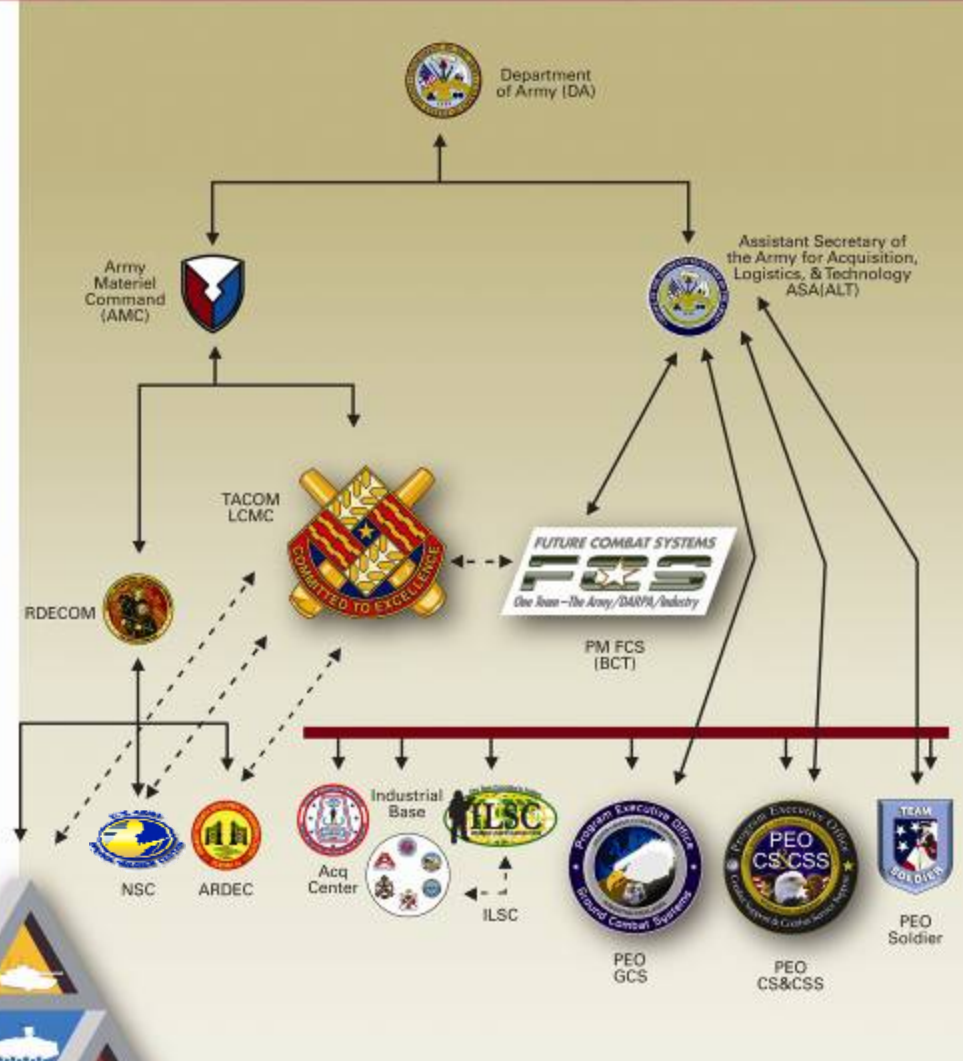
**VISION:** Be the first choice of technology and engineering expertise for ground vehicle systems and support equipment — today and tomorrow.

**TARDEC** - Responsible for Research, Development and Engineering Support to **2,800** Army systems and many of the Army's and DOD's top joint warfighter development programs.





**Research, Development and Engineering Command**



**TACOM LCMC Enterprise**

**CHRYSLER**  
ENGINEERED BEAUTIFULLY

**GM**

**HYUNDAI**

**TOYOTA**

**Ford**

- **Direct Linkage to World-class Automotive Research & Development Centers**
- **2<sup>nd</sup> & 3<sup>rd</sup> Tier Automotive Supplier Network**

**TARDEC is located in Warren, MI**

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## Ground Vehicle Power & Mobility

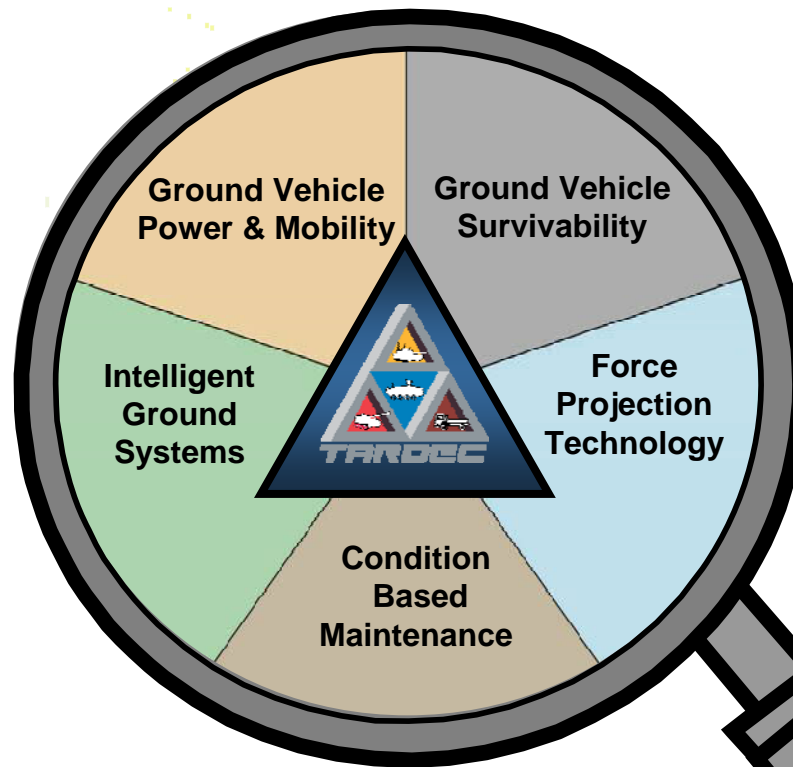
- Hybrid Electric
- Pulse Power
- Engines
- Fuel Cells
- Suspension
- Tracks

## Intelligent Ground Systems

- Robotic Systems Technology
- Human-Robot Interaction
- Crew Interface and Automation
- Robotic Follower ATD
- ARV Robotic Technologies Program

## Condition Based Maintenance

- Water Generation & Purification
- Petroleum, Oils & Lubricants
- Mechanical Countermine
- Combat Engineering/Bridging
- Gap Crossing
- Future Truck Systems



## Ground Vehicle Survivability

- Active Defense
- Signature Management
- Laser Vision Protection
- Ballistic Protection

## Force Projection Technology

- Diagnostics/Prognostics
- Data Analytics
- Sensor Integration
- Network Architectures
- Predictive Maintenance

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- High Performance Computing
- Propulsion Laboratory (Air Flow, Battery Testing)
- Power & Energy Systems Integration Lab
- Future Combat Systems Structural Material Development and Testing
- Water Quality and Water Test Cell Laboratories
- Engine/Transmission Test Cell
- Stryker Systems Integration Lab
- Ballistics Range
- Drop Tower
- Motion Base Technologies



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- **TARDEC's priority – Support the Fight!**
- **Our Mission is to be the full Life-Cycle engineering support & provider-of-first-choice for all DoD ground combat & ground combat support weapons & vehicle systems – today & tomorrow.**
- **Continue fostering relationships with the TACOM-LCMC, Industry & Academia.**

