



NASA AMES

NASA Ames Rotary Wing Engineering, Modeling, and Simulation (REMS)

MTI won this competitive, small biz set-aside award and successfully executed 78 task orders for NASA Ames – managing a team of 20+ subcontractors from 2007–2014. MTI won the follow-on 5-year award in 2013 (\$20M ceiling), with 34 task orders awarded, and managed a large group of subcontractors performing, R&D, modeling & simulation, test planning and execution (wind tunnel), and other engineering services.

During the first 5-year contract, NASA ran between \$1M and \$2M per year in task orders through this contract. The current contract allows MTI to subcontract 100% of technical tasks that fall in technical areas outside of the four specific technical areas that MTI bid specific technical expertise. The current REMS base contract ended in February 2018, but task order performance continues through the end of the calendar year. The follow-on Vertical Lift Technology Development (VLTD) proposal has been submitted to NASA (with an anticipated start date of June 1, 2018) and a ceiling of \$24M.

The following broad categories describe the scope of the follow-on VLTD effort:

- Aeronautical vertical lift technology development in engineering, research, and development;
- Vertical lift aeromechanics modeling and analysis;
- Simulation facility hardware and software development for experimental research and feasibility assessments including human-in-the-loop simulation research and development, test and evaluation, and training;
- Aircraft performance, handling qualities, cockpit displays, and flight control systems analysis and evaluation;
- Mission effectiveness analysis, modeling and simulation, and program analysis and management; and
- Air traffic management development and assessment of new operating procedures and interfaces integrating vertical lift aircraft in an efficient, productive, and safe manner.



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NASA Ames Rotary Wing Technology Development (RWTD)

After holding the REMS IDIQ task order contract for several years, MTI bid on the full and open version of this contract. MTI assembled a team of 16 innovative subcontractors, both small and large business.

MTI was awarded one of five RWTD contracts (\$40M ceiling) with an ordering period that goes to December 2019. The other awardees are Boeing Helicopter, Sikorsky Helicopter (now Lockheed), Bell/Textron, and the Georgia Tech Research Institute (GTRI).

Task orders are competed among the five awardees under this MAC IDIQ contract in the following general areas:

- Assessment of Advanced Rotorcraft Technologies
- Assessment of Rotorcraft Requirements in the Next Generation Air Traffic Management System
- Prognostics and Health Management Assessments
- Research Flight Testing
- Wind Tunnel Test Stands
- Hardware Gear Testing Components
- Advanced Rotor Technology/Configuration Assessments
- Drive System Sensitivity Studies for Rotorcraft
- Avionics Processor Equipment and GPS Upgrades
- Health Usage Monitoring Systems (HUMS) Technology Assessments and Demonstrations
- Engineering Analyses of Advanced Concepts
- Subject Material Expert Review
- Advanced Cockpit Crew Station Research Cancel