PRESS RELEASE

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Ricardo software included in NASA's technology transfer portfolio

The Technology Transfer Office of NASA’s Johnson Space Center (JSC) aims to ensure that innovations developed for space exploration are made available for wider commercial use. Having proven its value in the planning of future NASA missions, Ricardo’s advanced Five Dimensional Task Analysis Visualization (5D-TAV) software has now been selected for inclusion in JSC’s technology transfer portfolio.

NASA has an enviable and well-deserved reputation for the planning and execution of the most challenging, safety-critical and complex of space missions. The planning, in particular of long-duration, manned deep-space missions is an extremely complex and data-intensive process. This requires the close and effective collaboration of diverse specialist scientists and engineers, spanning risk managers, operations controllers, systems developers, human factors analysts, human-machine automation experts, human error evaluators, resource planners, and user interface/user experience creators.

Visualization, analysis and manipulation of large, complex and dynamic datasets to optimize operational planning needed new methods, for which NASA turned to Ricardo Defense’s research expertise in workflow-driven user experience. Model-driven analysis refined for mission-critical military applications resulted in new
visualization techniques and a rapidly developed software application for NASA in the form of the Ricardo 5D-TAV mission critical planning software, which allows teams to quickly analyse extremely large datasets in order to isolate potential conflicts, risks, human or system errors, or excessive workload. This enables operating plans to be optimized, including providing for resilient contingencies. The software also enables the investigation of opportunities to eliminate activities that do not add value, thereby minimizing cost, complexity, and susceptibility.

The announcement of the selection by the JSC New Technology Evaluation Board of Ricardo’s 5D-TAV software for publication in the official NASA Software Catalog, opens the path for possible wider industrial applications of this sophisticated planning technology. In accordance with the commercialization objective of Small Business Innovative Research (SBIR), Ricardo Defense is also advancing the software for Mission Critical Planning (MCP) available to any business worldwide that needs a high confidence in long-range future success.

“On behalf of Ricardo I am extremely proud that our advanced 5D-TAV software has been selected for inclusion in NASA’s technology transfer portfolio,” commented Chet Gryczan, president of Ricardo Defense. “Adapting analysis and rapid software capabilities honed for military customers, has rapidly provided a breakthrough application for NASA that has clear potential to provide benefits in other industrial sectors. With its new listing in the NASA Software Catalog, Ricardo’s 5D-TAV software technology is likely to be of interest in sectors ranging from energy systems management, autonomous vehicle development, hazardous materials handling, and disaster response planning, to transportation systems optimization, and organizational re-engineering.

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NOTES TO EDITORS:

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