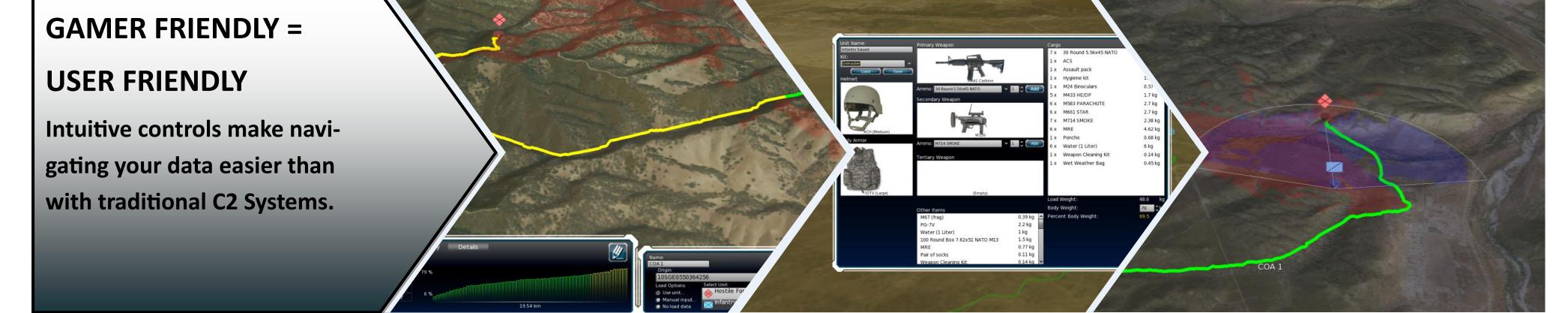




# Load and Route Evaluation for Dismounted Operations



# **GAMER FRIENDLY =**





# APPLIED VISIONS

#### **Key Benefits**

Faster training — built with computer gaming technology LAREDO's look and feel is second nature to today's generation of warfighters; they get hands-on right away and learn quickly.

Enhanced situational awareness— Move the 3D viewpoint anywhere in the theater, select waypoints, calculate lines of sight, and quickly consider course of action alternatives. "What-if" support — allow for hypothetical situation planning using time-distance calculations, travel constraints such as day/night, road type, weather, exclusion areas, choke points, and desired arrival times.

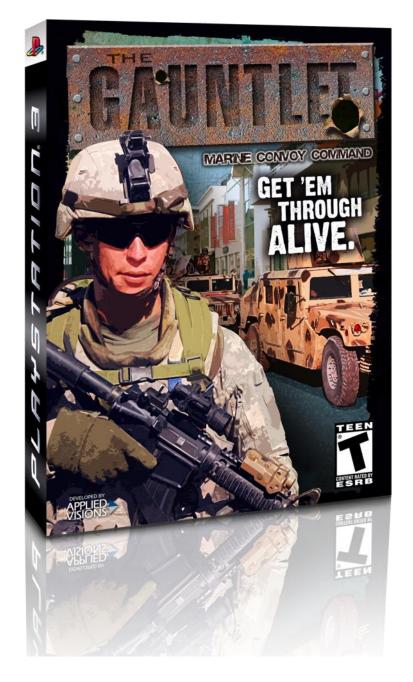
### Help Small Units Get Through Safely

Getting from point A to point B in any hostile environment is challenging. To do so in an unfamiliar enemy territory while taking multiple factors into account is fraught with risk. Yet this is precisely the task facing infantry route planners. Planners must take into account knowledge about soldier equipment loads, terrains, roads and population density, and also dynamic information including enemy positions, local civilian behavior, weather, and other factors that might occur prior to and during plan execution.

Complex risk factors complicate the planning process. Few experts understand the impact of load, temperature, altitude and humidity on foot marches. Additionally, route planning has to be performed despite 'gaps' in intelligence, including missing information and varying reliability and accuracy due to the source. Finally, route planning in hostile territory usually involves weighing options against costs.

#### **Technology Description**

LAREDO is based on advanced terrain reasoning, and visualization technology adapted from the computer gaming market. LAREDO will provide route planners with an unprecedented level of situational awareness, identifying routes and concomitant planning factors in 3D along with accurate National Geospatial Agency (NGA) terrain and feature data.



Affordability — LAREDO runs on standard commercial-grade laptops and desktops while making use of maximum use of open-source software tools, including the Delta-3D game engine.

Minimize Fog of War — Visual Data filtering enables users to minimize clutter to view and analyze multiple battlefield elements effectively.

#### **About Applied Visions, Inc.**

Applied Visions provides software engineering, product development, and research services for government and commercial customers. AVI specializes in

#### **Game Framework = Great Training**

Future plans include development of a training version – The GAUNTLET-- built upon the same "serious games" technology framework. Using game-based AI, GAUNTLET will challenge small unit leaders with realistic scenarios to help them hone the skills needed for mission planning, including route and equipment selection, use of terrain, weather and battlefield tactics to maximize success and safety.

#### **About LAREDO**

LAREDO was first developed under SBIR Topic A11-129 Built atop LAREDO, The GAUNTLET is AVI's serious game concept designed to train squad-level planners in their skillset.

#### **For Additional Information**

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