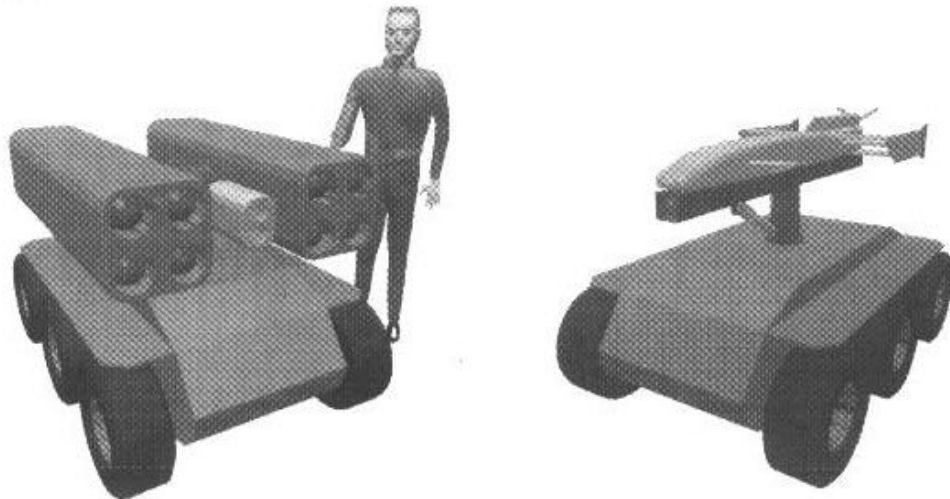


Phoenix Navigation & Guidance Inc.
10074 E. H58
Munising, MI 49862
Ph (906) 387-4373

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Phoenix Advanced Warfighting System

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Chief Strategist: Ken Rieli, CEO

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Subject

Future Warfighting Efforts Using High-Mobility Unmanned Platforms

Overview

Past warfighting efforts -- particularly the Gulf War -- have demonstrated to communities around the globe the need to increase high technology capabilities. With more than half of the world's countries actively developing UAV and other robotic systems for warfighting, the day of the robot war scenario is rapidly approaching. The ancient skill of hand-to-hand combat will soon be replaced by technology wars in which battles and wars will be won by depleting the opponent's technical resources -- not human resources.

Objective

To decrease casualty risk to personnel; to effectively deplete enemy war-making capabilities at lower cost.

Solution

Our solution is to fully develop our company's proprietary technologies into a low-cost, multi-purpose, reconfigurable, highly mobile, unmanned, front line warfighting platform.

This system consists of a small (5 ft. x 8 ft.) all-terrain vehicle with a low profile. A center-top rotating arm may be fitted with a variety of sensors/weapons -- including UAVs for reconnaissance and sensor deployment. New engine designs deliver the necessary horsepower for high performance at low cost to manufacture & maintain; reduced noise and heat enhances low-signature or stealth characteristics. Large numbers of these units may be sent to forward positions, working as singles or in groups to repel armor, personnel or aerospace targets.

System Characteristics

- Autonomous and ROV capable
- Reduced signature -- low profile, low noise, dispersed heat
- New stealth engine delivers high horsepower with low noise signature
- In-field systems managed from ship base, with over-the-horizon autonomous operations
- Forward theatre sensor deployment
- Firepower transport and delivery
- Capable of negotiating extreme terrain
- Increase battlefield situational awareness through on-board sensors
- Low cost/unit = expendable technology
- Absolute, hacker-proof secure command & control

Status of Project

Presently the system is in prototype. The ground vehicle drive train has been tested over a number of years. A new stealth-type engine is being designed for future retrofit. Navigation, guidance and associated electronics systems are ongoing developments and will be integrated into the final design.

Personnel

The principal project manager possesses the unique combination of expertise to carry out the proposed R&D effort. Beginning in the late 1960's on the MACV project at LTV Aerospace, he has since then added the necessary computer and electronics skills.

Other engineers/experts are subcontracted as needed.

Costs

Cost to complete first prototype: \$500,000

Per unit cost to end customer:

- Basic ground vehicle platform: \$25,000
- Other peripherals such as armaments, UAVs, sensors: to be determined

Commercial Applications of Resultant Technology

1. Autonomous vehicles may be useful for inspection work over rough terrain (pipelines, power lines), rescue work, and assorted dangerous/rough-terrain situations.
2. The new engine design will be of particular benefit in trucking, marine and UAV markets. The low cost of production, maintenance and several-million-mile longevity (engine life) will make this a design of choice in transportation.
3. Our industrial contacts in the People's Republic of China have assured us that, immediately after production engineering is completed, they are interested in setting up production of the proposed technologies for the global marketplace.