Robotic Vehicles

Descendants of Tesla's Teleautomaton!

Warren Williams

Tesla's 1897 unveiling of a remote controlled boat ushered in an era that lay dormant for decades. It was an excellent demonstration of the integration of radio, logic circuits, and mechanical interfaces... and far ahead of its times. Robotics would lay dormant until the advent of the American space program and microcircuits.

Today, unmanned aerial vehicles (such as Predator) prowl the skies seeking targets with ground controllers providing real time guidance via radio. Planetary exploration has gotten a boost with the deployment of small Mars rovers which have a limited degree of autonomy. The challenge of the future was summed up in his 1900 essay... "The Problem of Increasing Human Energy" in which he envisions armies of battling robots.

DARPA has set out to perfect Tesla's dream. In their competitions, they require vehicles to find their way and drive a 210-mile trek without a human driver or operator, using solely their own sensors and computers to recognize and navigate through the difficult mountainous and desert terrain. Shown above, Warren's Ladibug robot is a modified Kawasaki ATV fitted with short-range microwave radar, ultrasound sensors, and GPS. His presentation and demonstration will prove Tesla's vision is near at hand!

The 'Tesla Turbine'

— Detroit's Best Weapon — Against Peak Oil Economics

Jeffery Hayes
Tesla Engine Builders Association

Nikola Tesla gave us the design for a complete hybrid capable of exceeding 100 mpg. In the early 1990s Volvo proved the concept with their "Environmental Concept Car." Although a revolution for vehicles, the Volvo was not economic for production due to the part of the system that was not Tesla's. This missing component was the engine. Although Volvo used a specially developed bladed turbine to drive a Tesla high frequency alternator, it was not the revolutionary 'Tesla Turbine.'

The Tesla Turbine can operate at red heat while using dirty water for half of its fuel volume and is capable of completing a "combined cycle" in a single stage. It is the cheapest and safest turbine of any type and even self regulates speed. The thermal efficiency can be more than doubled, easily exceeding the 45 mpg of the mid sized Volvo 850 conversion. This is very significant, as all that is required to end U.S. foreign oil dependence is an average fleet efficiency of only 35 mpg.

This is a unique opportunity Detroit to turn the tables using Tesla Technology. Simple in its basic design, with few moving parts, the Tesla engine is relatively inexpensive to manufacture, and requires less maintenance than a typical conventional engine.

Practical Demonstration of Wireless Transmission!

Tesla's Worldwide Wireless Energy Transmission System

Gary Peterson

Tesla is well known for his pioneering development of the 3-phase AC electrical power system and the reworking of his predecessor's primitive RF power supplies, ultimately providing mankind with the world's first practical radio communications system. This presentation describes the development of some original electrical apparatus; from an early electric arc lighting system to his advanced system for the wireless transmission of electrical energy. A small-scale Tesla wireless system will be demonstrated, and some alternative theories will be proposed to explain its operation.

At this time of accelerating dangerous circumstances, such as global climate change and the depletion of petroleum reserves, a set of clearly defined comprehensive solutions is needed to overcome the present impasse of world-opposed thinkers and ideological dogmas. Planners, architects, and engineers must assume responsibility for our future wellbeing. Go to work and, above all, co-operate with one another, not holding back nor seeking personal gain at the expense of others, always heeding the infinitely accommodative synergetic laws of the "intellectual integrity governing universe."

Tesla stood on the shoulders of those who preceded him, improving upon what had been done before and coming up with completely new and original ideas. We too must continually add to the existing accumulation of perpetual knowledge. This is the way to increase human energy.