

# BATTLEAXE (SPV)

RUMBLER CARS - MINK - FUTURE BRITISH ARMY VARIANT LIGHT TANK

SPV - STRIKE PATROL VEHICLE

## INTRODUCTION

This proposal draws on many year's thought on a future high agility, amphibious light tank design, with the emphasis on physical design rather than armour. No matter how much armour you lay onto a vehicle it remains tremendously vulnerable to destruction in the modern battle environment. There has to be another way to achieve protection and performance with a 21st Century approach, blending advanced composite materials, physical form of design and new active defensive weaponry.

Welcome to the Battleaxe.

I have been prompted to bring these concepts forward in light of recent trouble with the British Army Ajax light tank, that after so much was spent there was relatively little result compared to what is really possible. The old 20th Century design approach must be replaced.

## DESIGN SHAPE

I began my early design thoughts with the physical profile of the hull. My first focus was on the shape of the hull to deflect/disperse the shockwaves from local concussive weapons, IEDs, land mines, etc. Rather than a flat-sided box surface I chose a curve, an arch (1.), to carry the load across the entire hull. Rather than crumple under force I suspect (to be evaluated in tests) an arched form will diffuse a blast more effectively in shielding the vehicle and crew from destruction.

To achieve the best effect, with the most spacious hull, I reverted to a very old design for the tracks, from the Mk1 tank, placing the treads over the top of the hull, such that the arched hull can flare out into the space between upper and lower treads (2.).

## ACTIVE DEFENCE

A light tank, for reconnaissance or other tip-of-the-spear roles, will never have the shielding of heavy armour against ever-evolving attack missiles, mines, other devices. The Battleaxe has to get actively involved in interception and destruction of any intruder close to its physical space. It needs anti-intruder weaponry sufficient to sweep most or all sides and surrounding space of the vehicle. To this end I suggest exploring the options of creating a range of close-in weapons, beginning with an adaption of the FM P90 style sub-machine gun

with its armour-piercing 5.7mm rounds to spray the air with enough short-range (200 yards) metal to stop many attackers. Wide-angle ball turrets (3.), with numerous additional devices, cover most space around the vehicle.

## OFFENSIVE WEAPONRY

Forget a main heavy turret and gun. Battleaxe may come equipped with two forms of heavy weaponry: a third ball turret at the rear (4.) for a 0.5 inch machine gun mounted above a 40mm grenade launcher, both giving ample fire support upto 1500 yards out; and long range strike weapons out of a bank (5.) of upto 400 x 2.5 inch missiles, suicide drones and other options.

## CONTROL TECHNOLOGY

Battleaxe is intended for a crew of two supported by the widest range of sensors and remote controls from a central drive cabin (6.) shielded front and rear with double-skin armoured bulkheads.

Drive systems (7.) for the Battleaxe come from my work on the Rumbler Sport Tank, a high efficiency engine and hydrogen fuel cell hybrid power train, and electric motors driving the tracks to remove the weight and complexity of a mechanical transmission.

## MODULARITY

A very strong focus of the entire design, technology, weapons, etc., is modularity of form. Everything plugs into and can be stripped from its housings. Thus all the weapons can be stripped out and used independently, whether the light machine guns for personal arms or the missiles for shoulder-mounted launching.

In this way Battleaxe can become a framework for a range of systems around a core hull and design for the next generation of field combat.

## COST

Unlike Ajax, the Battleaxe may be financed in a budget-friendly fashion in helping establish a new prime contractor and development centre for UK advance civil and military technology and engineering.

END.

## Battleaxe Key Details (1st Concept):-

Design: flared hull, possible of advanced composite materials in outer shell of hardened materials.

Length: approx. 24 foot.  
Width: 9 foot, plus outside armour when needed.

Performance: to be arranged.

Weapons: 2 x 5.7mm MicroGuns for self defence + 1 x 0.5 inch heavy machine gun + 1 x 40mm belt-fed grenade launcher + bank of assorted missile launcher tubes (upto 400 rounds).

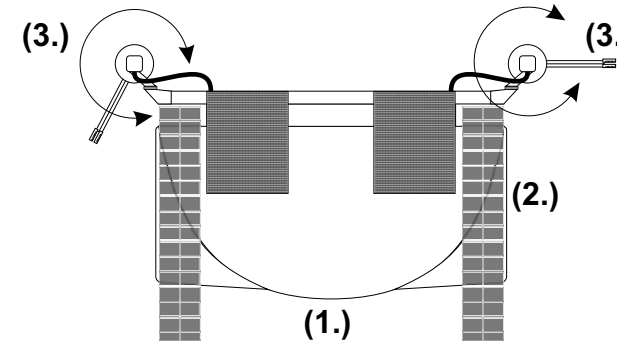
Other weapons: full dismountable independent action of all weapons + some options for directed energy weapons.

Sensors: hull, turret and drone mounted.

Engineering: self-repair crane, ground clearance bulldozer blade.

Cost: Special arrangements to be discussed.

Economic benefit to UK: engineering, technology, micro-technology, aerospace, robotics, armaments industries.



Turrets at rear - all able to swing out and depress 90 degrees downwards for firefights over the edge of cliffs, etc.

