INVEST IN **ACTIVE SAFETY SYSTEM TECHNOLOGIES INC.**

Amazing safety systems to protect US soldiers/citizens from IEDs/eVTOL crashes

PITCH VIDEO | INVESTOR PANEL

asst-technologies.com Shelby MI

Hardware | Technology | Manufacturing | Engineering | Aerospace

LEAD INVESTOR

Robert J. Kmiecik

ASST possesses a game changing technology package that will save lives of Soldiers on the modern battlefield, protecting them from the hazards of global acceleration in addition to other underbelly blast effects. The technologies also translate to the civilian up-armored market, protecting high value individuals at a relatively low weight burden. The group's technologies will also provide unparalleled safety in the upcoming eVTOL market. The potential ROI is extremely high.

Invested $25,000 this round

Highlights

1. ASST will have access to distribution agreement for sale of ABBS product range in US and Canada
2. ASST will market novel patented ABBS technologies already extensively tested by US Army and UK MOD.
3. Two key innovations: A Safety Eco-System for eVTOLs and an Armored Vehicle IED Protection System.
4. ASST will have the license to 3 registered & 2 pending US patents (one approved November 2021).
5. Working at highest levels in our markets: The Pentagon, DARPA, Armed Forces, Aviation Authorities.
6. Discussions ongoing with Pentagon Rapid Reaction Technology Office and the US Army GVSC Detroit.
Authorities.
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7. ASST will market an Artificial Intelligence system to identify landing sites under flight path
8. ASST will market a crash prevention system being developed with a US Ballistic Parachute supplier.

Our Team

Roger Sloman Chief Executive Officer

Inventor and serial entrepreneur, introduced carbon fibre to F1 motor racing in 1975, identified Active Mine Protection concept in 2008 and eVTOL safety system in 2013. Has invested over $2.6million and the last 13 years in developing ABBS and ASST.

The awful injuries and high fatalities caused by IEDs and land mines in Afghanistan and Iraq needed a solution. Roger Sloman identified a potential solution in 2008 and has invested 13 years of his life and over $2.6M in pursuing it. In 2013 he also saw that the same technology using rocket motors could save lives in helicopters and eVTOLs.

Brigadier (Ret'd) Ian Cameron-Mowat Chairman

A former Head of Force Protection for the UK Ministry of Defence with a wide range of contacts and current activities in the defence market.

Don Szkubiel Chief Operating Officer

With over 30 years working with the US Department of Defense, Don has excellent contacts with the US Army Ground Vehicles Survivability Centre and US Special Forces. Located close to the US Army Ground Vehicle Systems Centre in Detroit.

Dr. David Field Director

Strong technical background in Materials Science and Metallurgy combined with considerable skills in strategic market research, sales, sales management and analysis; plus bid writing. Has been instrumental in ABBS sourcing $1.27million UK R&D Grants.

Rich Mellor Secretary

Former UK lawyer with 20+ years experience as controls engineer, website programmer and contracts manager. Deals with shareholder communications, managing contracts and our publicity.

David Staveley Chairman of Advisory Board

International business background, been working with ABBS in the UK for 11 years. Leads and supports on negotiations and commercial arrangements.

Robert J. Kmiecik Advisory Board - Military Consultant

With over 30 years of military service, attaining the rank of Colonel, Rocky is the Former Director of Mounted Requirements at the Maneuver Center of Excellence at Fort Benning GA, where new military vehicle designs are specified.

Brian Coaker Advisory Board - Technical Consultant

Chartered Engineer & Scientist, specialist, high-level expertise in Safe/Arm and sensor/control and initiation systems. Brian has been with us for 6 years and is currently the key technical resource for both ABBS and ASST.

Simon Flear Advisory Board - Finance Consultant

Chartered Accountant, specialises in forensic accounting, advises companies and prepares forecasts. His experience of carrying out forensic accounting investigations in many companies is a great asset for ABBS and ASST.

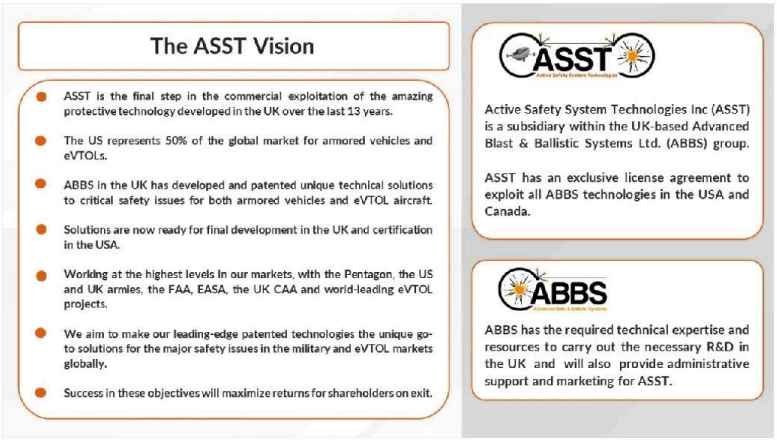
Larry Edward Williams Advisory Board - Ballistics Advisor

Chief Executive Officer & President of Aviation Safety Resources, Inc, with 20+ years personal experience in the aviation safety industry. ASR designs, tests, and produces emergency parachute recovery systems for light aircraft.

Pitch

Active Safety Systems that Save Lives

Investors will be investing in Active Safety System Technologies Inc (ASST). ASST is a subsidiary of Advanced Blast and Ballistic Systems Ltd. (ABBS) based in the UK and will have the exclusive distribution rights for ABBS products in the USA and Canada.



Download Pitch Deck

The parent company, ABBS, develops technology that protects American soldiers and citizens - both on the battlefield and here at home. ASST will have the exclusive rights to market those key solutions to the North American market.

The two major product areas which ASST will be marketing are the ABBS **Armored Vehicle Protection Systems** and **Safety Eco-System for eVTOL (electric Vertical Take-off and Landing) Aircraft.**

The Armored Vehicle Protection Systems are built on ABBS's exceptionally powerful VGAM™ (Vehicle Global Acceleration Mitigation) system for counteracting mine/IED explosions. The systems are being developed by ABBS (the parent company of ASST) with funding from the US Army under a multi-year Cooperative R&D Agreement (CRADA)

The Safety Eco-System for eVTOL is built on ABBS's proprietary active "Zero Altitude - Zero Speed" system and combines parachutes and retro-rockets with specific sequences for each emergency circumstance to control the descent rate

and achieve a safe, soft landing. The systems are being developed by ABBS (the parent company of ASST) in conjunction with a specialist Artificial Intelligence (AI) company in the UK, alongside a leading ballistic recovery system provider in the US.

Whilst one system is clearly defence-related and the other serves the aerospace market both of these safety systems are built around different versions of the same SAFE/ARM and sensor control/initiation technology and powerful rocket motors as core elements of both systems.

ABBS (Parent Company) Armored Vehicle Protection Systems

Improvised Explosive Devices (IEDs) were the largest cause of civilian and military death during recent wars. In Afghanistan alone, 42% of US military deaths and 49% of UK military deaths were caused by IEDs.

When a vehicle hits a mine or IED it is often accelerated very quickly up into the air. This is known as the Global Acceleration of the whole vehicle, and above a certain level (about 30feet/second) it can result in spinal compression injuries. The occupants can be killed or severely injured **just by this rapid acceleration upwards** even if the vehicle cabin is not penetrated by the blast.

ABBS's Armored Vehicle Protection Systems counteract the lifting forces of the mine, keeping the vehicle on or near the ground and preventing injuries to the occupants.

ASST will have the sole licensing rights to distribute ABBS products, backed by a strong patent portfolio owned by its parent company, ABBS, across North America.

The ABBS (Parent Company) VGAM System

The Vehicle Global Acceleration Mitigation (VGAM™) system uses patented high-impulse Linear Rocket Motors (LRM™) to keep the vehicle on or near the ground to prevent fatal or disabling spinal injuries.

At the same time, carbon fiber reinforced belly plates and active floor systems protect the occupants from the other threats from underbelly mines and IEDs, with stroking blast seats dealing with any residual Global Acceleration.

The full suite of systems provides protection against all threats to the occupants from under-belly mines and IEDs.

The combined result is a lightweight, effective system for protecting modern armored vehicles from the effects of mine and IEDs, with the possibility of even the biggest IEDs being defeated. Funding for the urgent development of this very large IED capability is being pursued in a coordinated approach to the US Army and the Pentagon.

ASST's target customers for the Armored Vehicle Protection Systems are the US and Canadian armed forces, to which we expect to sell our systems after they have been certified for use. We also plan to sell our systems to aid agencies such as the United Nations and other non-governmental bodies operating in war zones and former war zones where legacy mines and IED's are a pervasive and enduring threat. The parent of ASST (ABBS) is similarly pursuing the global market outside the USA and Canada.

The system is completely modular and depending on the specific elements and specifications required, the value per vehicle could be anything from $20,000 - $400,000.

Recent and Planned Developments

Potential $100M p.a. market when system is certified → US Army long term target

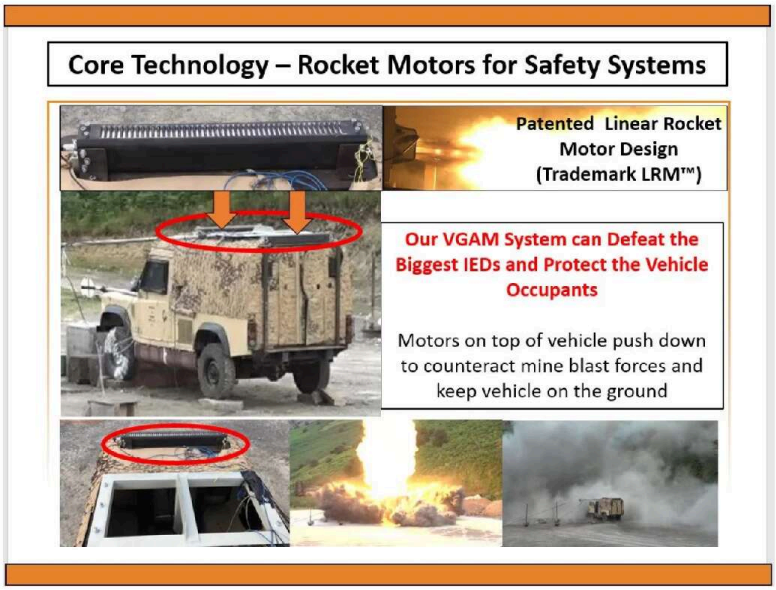
Customer or Market	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
US Army	Motor Testing under 6 year R&D agreement is ongoing					Specific Vehicle Certification?		Potential Production		
Toyota Hilux Mine Protection	Proof of Concept Testing (£219K) completed			Development for Special Forces, UN Aid/Mine Clearance etc.				Large Scale Production?		

Customer or Market	2020	2021	2022
UK MOD (£43K) Project completed Nov. 2021	Project to evaluate the benefit of adding carbon fiber to steel belly plates. Further proposal being made including a belly plate for a specific European vehicle.		
US Pentagon Rapid Reaction Technology Office		Winter 2021/Spring 2022 – Technology Discovery Event – ASST Invited to demonstrate all technologies.	

Forward-looking projections cannot be guaranteed.

Proven VGAM Technology – Snatch Land Rover Testing in UK 2017

The full suite of systems was first tested in the UK in 2017 on a Snatch Land Rover which was a basic lightly protected UK Army patrol vehicle.



Further Major US Army Test in the USA

The 2017 UK proof test was followed by a much larger US test carried out in 2018 by BAE Land Systems on behalf of the US Army. This is still classified but it can be reported that it was completely successful. Further testing by the US Army to determine the best configuration for the Linear Rocket Motors continued during 2020.

Media Interest Led to the Pentagon's Direct Response

The British Forces Broadcasting Service video below outlining how the technology works has been viewed over 1 million times and was seen by someone in the Pentagon Rapid Reaction Technology Office, who then contacted ABBS in the UK directly .

This led to us being invited to present at a Pentagon Technology Discovery Event at which we will liaise with the relevant personnel and discuss possible funding routes for the full certification of the VGAM technology, supported by personnel from the US Army Ground Vehicle Systems Centre in Detroit.

We do anticipate that the further R&D and certification costs for the VGAM system will be funded by the Pentagon/US Army so that capital from this raise will not have to be spent on it.

Forward-looking projections cannot be guaranteed.

Belly Plate Development for Light Commercial Vehicles

Even without the top-mounted VGAM system, the newly designed shockwave-mitigating, energy-absorbing Composite Reinforced Belly Plate mounted on a Toyota Hilux can offer full protection for occupants against major injuries in the event of a 4kg TNT equivalent under-body mine blast, and partial protection (no penetration) against 6kg. This level of protection is far more than has ever previously been demonstrated on such a light civilian vehicle.

It is the strength of the technologies developed by its parent, ABBS which will provide ASST with a strong product portfolio to market in North America.

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ABBS (Parent Company) Safety Eco-System for eVTOL Aircraft

ASST is not just focussed on protecting the armed forces. We want to ensure that passengers and the general public on the ground are safe in the burgeoning Urban Air Mobility market where the new breed of electric Vertical Take-Off and Landing (eVTOL) aircraft and larger delivery drones will be allowed to operate at low height above cities.

eVTOLs will be commonplace in major cities across the United States within the next 5 years. Companies like Archer Aviation, Joby, Volocopter, Lilium, and Vertical Aerospace have announced multi-billion $ contracts to supply hundreds of eVTOL aircraft to major brands like United Airlines, JetBlue, Virgin Atlantic, American Airlines, lessor Avolon, helicopter group Bristow, Iberojet, and Japan's Marubeni group.

By 2030, the market is expected to be worth $15B+ and ASST will market the range of ABBS systems to these eVTOL manufacturers.

In principle, some individual elements of the complete safety system could be provided on all the anticipated 50,000 aircraft in the US, creating a potential almost $1billion annual market for ASST to target.

Forward looking statements cannot be guaranteed. ASST has the sole licensing rights to distribute ABBS products. ASST does not own the rights to any ABBS technologies, patents, or non-distribution-related contracts.

The Problem

Though eVTOLs are about to play a large role in our daily lives, there are some safety hazards that relate specifically to these large, multi-rotor drone-like aircraft that currently do not have solutions other than the multiple redundancy of systems that the designers are building into their designs.

Manufacturers are currently more concerned with building eVTOLs that can be certified and commercialized as soon as possible, while the regulators are still looking to update their certification standards before eVTOls enter public service, to take account of the varied novel design concepts.

eVTOLs currently have multiple redundancy measures (i.e. backup systems) built in, but redundancy does not deal with all the possible critical issues, especially large bird strikes.

Without reliable certified solutions for these scenarios, eVTOLs which have a serious malfunction are at risk of an uncontrolled descent, possibly crashing into pedestrians, cars, or buildings on the ground.

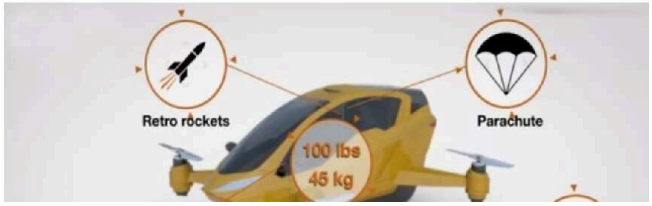
The ABBS (Parent Company) Solution

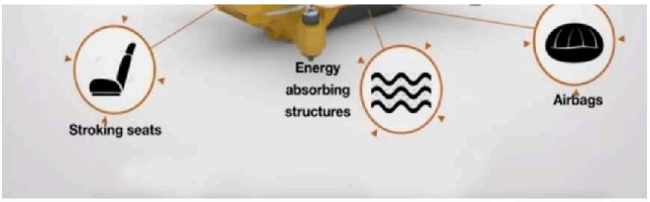
ASST will be able to market the crash prevention solution being developed by its parent, ABBS, to work in practically all circumstances, even when everything else fails, by using a combination of artificial intelligence, parachutes, retro-rocket motors, and stroking crashworthy seats.

We have entered into a collaboration agreement with our US partner, Aviation Safety Resources - a leading provider of ballistic parachute recovery systems for light aircraft and eVTOLs - to create a robust **Emergency Descent Arrest System (EDAS)** that is fully safe and will meet all aviation safety requirements.

The US patent for 'Emergency landing of aircraft' was approved on 19th November 2021 and is owned by the parent company, ABBS. ASST will have the benefit of this patent when offering the product to the US and Canadian markets.

The "Zero Altitude - Zero Speed" EDAS system controls the descent rate to achieve a safe and soft landing.





The 45kg/100lb system illustrated here is for a 2-seat 2,000kg personal aircraft which includes a parachute, retro-rocket motor system and stroking seats priced at about $30,000 to $50,000. For larger 4/5 seat UAM eVTOLs the full system could cost up to $250,000.

Elements of the Eco-System could be offered at lower cost for use on delivery drones where protecting the public from the potential of a drone falling out of the sky is essential to ensuring confidence in the use of this delivery method.

Recent and Planned Developments

Potential $200M p.a. market when EDAS and other systems are certified.

Customer or Market	2020	2021	2022	2023	2024	2025
Current ASR Ballistic Parachute Recovery System			Development of Rocket Motors	Commercial Sales of "Tractor" Motors for use on light Aircraft		
Emergency Descent Arrest System (EDAS)	Initial UK Trials	Development and Testing		Sales for Un-manned drones	Certification for Manned Applications	
Video/AI Emergency Landing Site Location System			Video/AI Look-Down Development		Testing/Certification and Production	
Video/AI Military GPS Denial of Service Mitigation System			Video/AI Look-Down GPS Development		Testing/Certification and Production	

Forward-looking projections cannot be guaranteed.

Proven Patented Technology, Major New Developments & Secured Agreements With Partners – The Vision for ASST

The full technology and product portfolio of the parent company, ABBS, consists of a mixture of proven systems and those requiring further development and certification. This provides ASST with a huge opportunity to exploit both the armored vehicle and eVTOL markets in the USA and Canada.

NOTE: Whilst ASST Inc will not own any of the patents / IP which will remain owned by the UK parent (ABBS), on completion of this fund-raising, ASST Inc will be granted the exclusive distribution rights for the entire ABBS technology portfolio in the USA and Canada.

The Vision for ASST

- **ASST is the final step in the commercial exploitation of the amazing protective technology developed in the UK over the last 13 years.**
- **The US represents 50% of the global market for armored vehicles and eVTOLs.**
- **ABBS in the UK has developed and patented unique technical solutions to critical safety issues for both armored vehicles and eVTOL aircraft.**
- **Solutions are now ready for final development in the UK**

- Solutions are now ready for final development in the UK and certification in the USA.
- Working at the highest levels in our markets, with the Pentagon, the US and UK armies, the FAA, EASA, the UK CAA and world-leading eVTOL projects.
- We aim to make our leading-edge patented technologies the unique go-to solutions for the major safety issues in the military and eVTOL markets globally.
- Success in these objectives will maximize returns for shareholders on exit.

This investment is in Active Safety System Technologies Inc - references to the UK based parent ABBS are intended by way of illustration of the potential market and technologies which will be marketed by ASST Inc in the USA and Canada only.

What's Next for ASST

Both of the major products, the VGAM and the eVTOL EDAS systems are in the late stages of development with defined routes to certification. We are preparing to commercialize these technologies and ABBS aim to make their leading-edge patented technologies the unique go-to solutions for the major safety issues in the military and eVTOL markets globally.

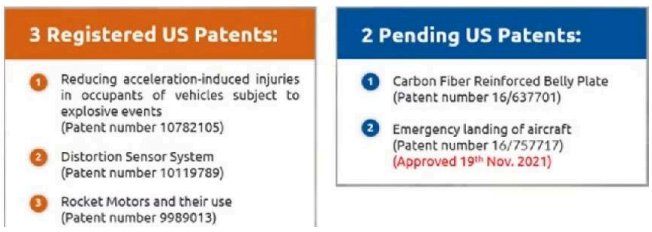
ABBS in the UK will remain responsible for the continued development and certification of the systems, leaving ASST to market those products to North America.

IP Overview

The parent company, ABBS, has a robust patent portfolio that protects both the eVTOL and Armored Vehicle solutions which ASST will be marketing.

The ABBS patent portfolio was valued by Inngot in October 2019 at $6,300,000 - $9,000,000 on a 'value contribution basis' and $11,000,000 - $12,200,000 on an 'invested value basis'.

ASST will have the benefit of the following US patents owned by its parent ABBS:



The parent company, ABBS have several potential R&D contracts, trials and commercial buyers in the pipeline in both of the major market areas.

We want to raise up to $250,000 to ensure that our marketing efforts in North America are successful. The funds raised will be utilised for general running costs of ASST and promotional activites, particularly to allow attendance at forthcoming armoured vehicle survivability conferences and the re-arranged Pentago TIDE event in September / October 2022.

Forward-looking projections cannot be guaranteed.

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<u>Potential Exits - Past History - The Advanced Composites Group in the UK.</u>

Roger Sloman started his first company in 1975 in the spare room and garage in his house making carbon fibre components for the Formula 1 motor racing cars and this was developed over 29 years into the Advanced Composites Group which was sold for $60.76m in 2004 at about 1.26 times T/O and 11.6 times Operating Profit. (Note:- $50million went to VC investors and staff.)

This high valuation for a private company buy-out was based on the combination of four key elements:

- Technology protected by patents.
- Unique prepreg carbon fibre material products for the aerospace and motor racing industries that gave a technical and/or cost advantage.
- A global marketing and sales footprint.
- Production in the USA.

ASST is based on the same combination of:

- Marketing ABBS Technology which is protected by patents .

- Unique products/technology that solve key safety problems for armored vehicles and eVTOL aircraft.
- A strong presence and existing contacts within both the US military and the

eVTOL market in the USA.

- Cooperative Manufacturing and Marketing Agreements for some parts of the business already established, with potential for further evolution in due course.

Potential Exits - Most Likely Scenarios

- Multiple potential exit routes are available due to the two different markets and technologies, but the most likely scenario in the near/intermediate future is for a global defence industry player to want to get access to, or control of the VGAM mine/IED protection system technology as this is truly unique, difficult to replicate due to the propellant manufacture and rocket motor expertise required, and very fully covered by granted patents in the key countries globally. ABBS (the parent company) currently have one such discussion which started in January 2022 with a major European defence company, whom are also involved with the next generation US Army vehicles and we therefore hope will want access to the same technologies in the US.
- The newly identified US Army requirement for a solution to the large IED threat and the potential Pentagon interest in the technology is creating potentially strong 'user pull' for the technology which means that the market for the product should develop in the relatively near term to repay the investment required to fully develop and certify the technology for production.
- A similar rationale applies to the suite of eVTOL safety systems which the parent company, ABBS has developed, with the rapidly developing US market being a major part of the global potential. ASST will be able to exploit the developing eVTOL market in North America by marketing the safety system technologies from its parent, ABBS.

Forward-looking projections cannot be guaranteed.

Financials

ASST Inc is currently a start-up Company and has no trading history. However, as a subsidiary within the larger UK-based Advanced Blast & Ballistic Systems Limited group ASST will be granted an exclusive distribution agreement to cover USA and Canada for all products sold by ABBS.

Previously ABBS has sold $900,000 of VGAM-related products for evaluation by the US Army, including for the very successful full scale vehicle test in 2018, and further rocket motor testing in 2020.

All R&D is carried out under ABBS control in the UK, and patent applications made by ABBS as appropriate. Total investment by ABBS since 2008 to date is over £8million/$10.8m.

As ABBS has all the facilities and staff to conduct the required R&D the UK will continue to be the location of all R&D until it is appropriate for specific work to be done by ASST in the USA.

All the R&D and product development is equally as relevant for ASST to sell in the US and Canadian markets as for ABBS in Europe and globally.

This investment is in Active Safety System Technologies Inc - references to the UK based parent ABBS are intended by way of illustration of the potential market and technologies which will be marketed by ASST Inc in the USA and Canada only.

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More Detailed Information

The Origin of the VGAM Concept, Why Existing Armored Vehicle Mine/IED Protection is Insufficient, and the Potentially Game-Changing Development Being Discussed With the US Army and the Pentagon RRTO.

Roger Sloman's first involvement in armored vehicle blast protection was in 2008 when, having retired after the sale of Advanced Composites Group, he was acting as a consultant for a small UK company which claimed to have a blast protection system for vehicles. He quickly proved the system did not work so he organized further testing using an ex-Russian BRDM2 armored vehicle.

On viewing the high-speed video Roger observed that while the vehicle was overturned by the 6kg blast under a front wheel, the complete vehicle did not begin to move upwards for about 10ms after the mine exploded. He concluded that this 10ms delay in movement was a time window during which it would be possible for some form of action to be taken to prevent the vehicle being blown into the air. But it was not until after he had left the company later that year in July that he realized that simply pushing down on the vehicle with very fast-acting powerful rocket motors could provide a solution. The initial patent application on the concept was made by ABBS in December 2008, identifying a novel rocket motor configuration that might be suitable for the purpose. After experimenting with different forms of countermeasure the Linear Rocket Motor concept was developed and implemented in testing, which proved to be an excellent solution, being lightweight and easily fitted anywhere on the top surface of the vehicle without any significant increase in the vehicle height.

Due to heavy losses from mines and IED's in Iraq and Afghanistan the US Army developed new vehicle designs with high ground clearance and deep V shaped hulls to help divert the mine blast forces out to the side, but the concept does have many disadvantages.

The high center of gravity results in instability and poor handling with roll-over accidents being quite frequent and the high vehicle presents a larger target for the enemy. The increased size and additional armor also made the vehicles very heavy with extremely high fuel consumption and almost no ability to move off-road for fear of getting bogged down in soft ground.

The combination of the V-hull, high ground clearance and the high weight did however reduce the issue of Global Acceleration injuries to the crew to a large extent, but after Afghanistan it was concluded that this type of design was impractical for general service and these big heavy vehicles with high fuel and maintenance costs have now largely been phased out, and new designs are more focused on light and medium weight designs, which of course are now more susceptible to the Global Acceleration problem, which is now the critical parameter limiting the mine/IED protection levels of modern armored vehicle designs.

Specifically, it is the limited capability of the stroking blast seats (about 30ft/s upwards velocity) in the vehicles to deal with the global acceleration level that determines the overall mine blast capability of the vehicle, which for light/medium weight vehicles is often in the 6kg or 8kg range, which is far below the size of many mines and IED's used in Afghanistan.

The addition of the VGAM system to a vehicle can dramatically increase the level of its mine blast capability, potentially to the 50+kg or even the 100kg level, and this is what ASST and its parent, ABBS are now promoting to the global armored vehicle industry.

The key factor is that the VGAM system can make the vehicle 'weigh' up to 1,000tons for just the 20 to 50ms required to counteract the blast lifting forces for the addition of just 0.5tons system weight added to the base vehicle design.

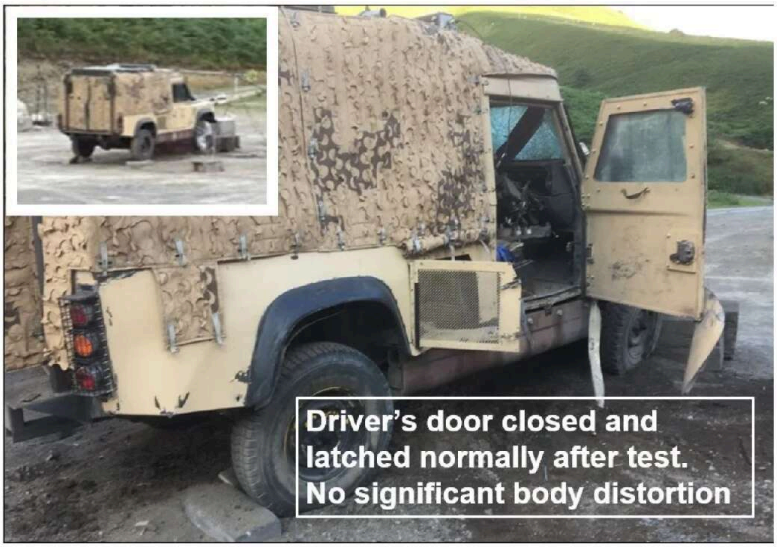
A Whole New Tactical Mobility Capability is Now Possible.

A whole new generation of armored vehicles with massively increased mine/IED protection levels is now possible, enabled solely by the availability of the VGAM technology to eliminate the Global Acceleration threat. And this new capability is now being put forward to the US Army as a game-changing development which will enable a major change in army tactics where mines and IEDs are a threat.

Currently mine fields are used conventionally to deny ground for manoeuvre by land forces, and in Afghanistan 'mobility' was often reduced to walking pace by the need for a individual to walk in front of a convoy to check for mines and IED's with a hand-held mine detection device, and then being stopped while threats are cleared manually. Additionally, if a convoy is on a narrow track, especially in hilly or mountainous regions, the tactic of hitting the lead vehicle with an IED to disable it and block the track is a critical ambush threat. In Afghanistan this did sometimes lead to very serious casualties, the Taliban being able to continue firing down from prepared elevated positions at the stationary convoy for a long period until air power and landing troops from helicopters could be used to control the situation.

The VGAM technology can be used to make armored vehicles so IED-resistant that they can sustain large IED hits and remain mobile, so that minefields and the tactic of disabling the lead vehicle in a convoy are no longer effective in restricting mobility.

Result After 6kg Anti-tank Mine With ASST System



Without the VGAM system and Carbon Fiber Belly Plate the vehicle is very badly damaged having been blown over 5m (16ft) into the air, and the occupants would all either die or be very seriously injured

The Detailed Sequence of Events