



HELIX



Helix Operations provide a complete capability for vertical access and rescue in mountain, maritime and urban environments.

We are based in the mountains of North Wales and have a heritage of over 40 years supplying tactical climbing solutions to end users. Over that time, we have worked with and become a main supplier of tactical climbing equipment to the UK MOD and have provided equipment and systems to many other nations.

The capability offered by our close relationship with DMM has been extended by partnering with manufacturers such as CTOMS, Henriksen, HQH, Protection, Rock Exotica, Highnovate and Cadex Defence to offer complete solutions for working at height in a tactical environment.

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NCAGE: U1YF9



To be the leading worldwide provider of comprehensive vertical access, rescue and mobility capabilities to the tactical operator in the mountain, urban and maritime environments.

To support vertical access operations for the tactical operator with a range of services including:

- Advice
- Equipment
- Training
- Servicing



Key Brands

REBS®

REBS supply many critical components of any maritime or urban access system. Rapid Entry Boarding Systems - the best maritime boarding equipment that also works well for urban operations. They supply the best grapnel launchers and the lightest carbon ladder systems on the market.



HQH SYSTEM

Robust carbon ladder systems - these are the go to ladders if TLC is in short supply. The FIX-LITE being the new ladder of choice for dismounted troops in urban environments with the ATV carbon bridge ladder demonstrating how tough carbon can be.



ATLAS DEVICES

The best motorised ascenders on the market with a real-life combination of versatility, ruggedness and battery life that is hard to beat.

CTOMS™

CTOMS was founded on the concept of evolving tactical medicine and expanded to encompass aspects of remote and improvised rescue. A key part of this evolution was the development of the TRACE™ system as micro rope system with a comprehensive capability that includes access, egress, hauling and high-lining. CTOMS are our longest standing partner and Helix are one of the very few authorised providers of training for the TRACE™ system.

LIBERVIT

LIBERVIT are an French company with over 25 years in design and manufacture of hydraulic tools and manual equipment for the industry, the special forces and the rescuers.



The DMM International group specialise in the manufacture of equipment and systems for operating safely at height. They have proudly manufactured all their hardware in the United Kingdom since 1981 and over that time they have established a reputation for innovation and quality.

As part of the same group of companies Helix Operations rely heavily on DMM to design, prototype and manufacture much of the core product in our range.

PROTECTION

An impressive micro rope system that is very intuitive to use, fast to deploy and incredibly robust. The system that came top in a recent egress system tender and impressed with its ability to meet the criteria of EN341 with a 160kg load.



Innovative rescue equipment designed and made in their factory in the USA. The range includes products that complement the DMM range of hardware - the Aztec pulley system, the Omni pulleys and the Arizona Vortex are all unique products that we are proud to offer.



Forward thinking equipment and systems designed by former operators to address gaps in current vertical assault capability. The QRAB is a class leading descender for medium diameter ropes that allows fast disengagement whilst the RAFA portable anchor gives security where normal anchors are not viable.



Precision engineering from the USA that specialises in high end rifle systems, but also produce the best small ledge hooks on the market.

Marlow

Designed and manufactured in the United Kingdom with a reputation for outstanding quality and a long history of providing specialist rope solutions to military and rescue units. Marlow Ropes have a proven record as a key manufacturer of quality ropes for access, rescue and specialist products for use in helicopter operations.

Manufacturing and Development

Helix Operations has the privilege of representing some of the best tactical access companies in the world, but we grew from a manufacturing background and so product development and manufacture are still an essential and fundamental part of our business.

We have invested heavily in the factory and now have a comprehensive manufacturing facility in North Wales with the ability to:

- Design, prototype, test and create tooling for safety critical metal and textile products.
- Forge, heat-treat and CNC both aluminium and steel product.
- Sew, laser cut and bond safety critical textile products.

All of which are run within a robust quality control system that allows complete traceability for every product.

We are part of a group that is the sole manufacturer of climbing hardware in the UK with a worldwide reputation for manufacturing premium quality product.

We work closely with end users to design product that enables operators to work with speed, ease, and safety when accessing objectives across a wide range of environments. This often involves forces and environmental factors in excess of those required for civilian certification and we can help customers test equipment and systems to help ensure that operational risk is minimised.



The Ghost carabiner was designed to create a quieter carabiner for covert situations - the Ghost uses a complex hot forged skeleton with an over-molded TPU outer layer. This creates a carabiner with a significantly reduced noise signature.

Harness Manufacturing

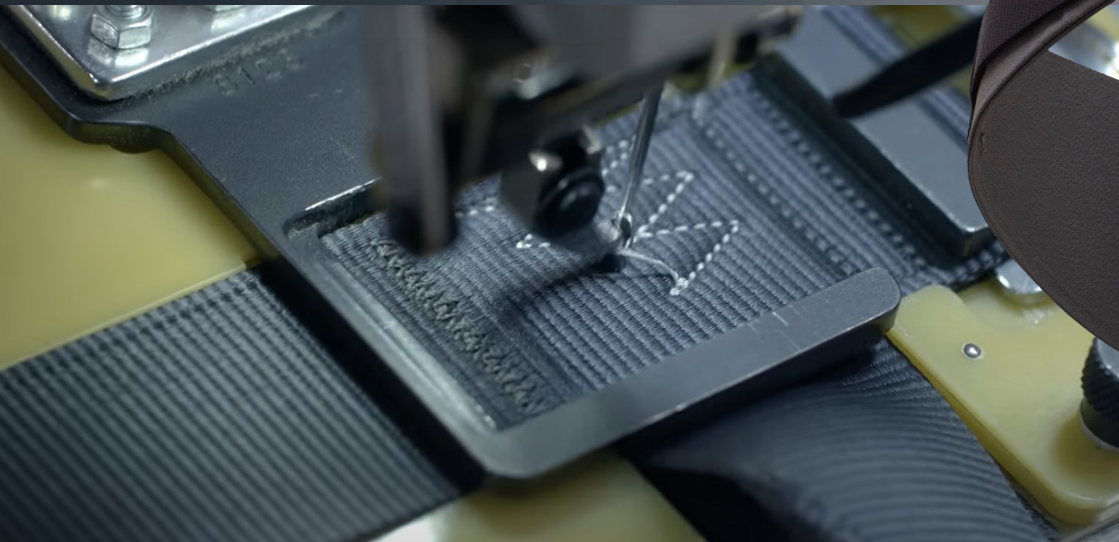
The HCMH II has been designed and is manufactured from start to finish in North Wales at the DMM factory in Llanberis. Once we had the design brief on how to improve the first generation model we realised that traditional tactical harness manufacturing processes would not give us the features we wanted.

Research led us to choose a totally new production process combining variable width, structural webbing with a laser cut, anatomically shaped bonded pad. This gave us very low-profile pads, but with material carefully positioned both to allow ease of movement when active, yet providing support when hanging.

The buckles are a new design from DMM using a marine grade stainless steel with an offset slot to eliminate accidental opening. They are coated in an electrophoretic black polymer to give a secure system that is fast to use and can't be affected by corrosion of debris.

All the bar tacks were developed from scratch to give maximum strength to the webbing infrastructure, and this has resulted in a harness that passed testing at 150kg rather than the standard 100kg.

Productisation of this harness has involved considerable investment in new machinery, but the end result is a class leading tactical harness system that has few, if any, competitors.





Maritime Operations

Maritime operations demand the highest level of skill and commitment from the operators involved, margins of safety are often reduced by the environment and the pace required to achieve the objective.

Therefore, the equipment provided for Maritime Operations must be of the highest quality across the board, robust, lightweight, intuitive in use and capable of functioning in the harshest of extremes. Helix Operations works with only the best manufacturers of high-end vertical assault solutions, supported by cutting edge research and development to provide products which will perform on demand every time.

Helix Operations provides a full range of ladders, telescopic poles, pneumatic poles, grapnel launchers and powered ascenders that can be used for both underwater and surface operations.

Training must also reflect the quality of our products and be suitable for the high tempo nature of maritime operations, training safely is extremely important. Helix Training can provide a range of training solutions to facilitate safe training provision as well as specialist courses for specific products in our range such as Grapnel Launchers and Powered Rope Ascenders.

REBS® Compact Grapnel Launcher

The Compact Launcher enables users to access high-up entry points by launching a grapnel hook on to a permanent fixture and then ascending ropes fixed from that point. The Launcher is perfect for entering buildings, bridges, ships, platforms or cliffs as well as crossing ravines or rivers, both for military and rescue scenarios. It is a high performance pneumatic launcher that can be used for both dive and RHIB operations.

The system is powered by pressured air, the 0.35L bottle can be easily be re-filled from a normal 300 bar diving bottle. Lower pressure diving systems can also be used to charge the tank. Users can set the firing pressure on the fly depending on the height required. A compact rope container can be mounted on the barrel and fits 115ft of 8 mm rope or 53ft of rope ladder. Multiple shots can be fired from a single bottle charge. The Compact Grapnel with spring-loaded folding arms will hook into any object such as wire, fences, railings, and structural and natural features. It can be used to deploy a climbing rope, flexible ladder or a horizontal traverse line.

The Piston Kit upgrade reduces both recoil and sound levels, providing both tactical and HSE benefits. It is easy to maintain and has a long and robust service life with proper post operations care. The Compact launcher is available in several kit options. A custom made transportation and storage box makes the Compact Launcher highly transportable and user friendly.



Air pressure and reach can be adjusted on the fly to optimise performance.

Can be used with a variety of rope options from 7.5 to 11.0mm to allow use powered ascenders and optimise reach/security for a particular task.

35m max height with grappling hook.

Optional (highly recommended) piston kit reduces noise signature and recoil.

16m Max height with rope ladder.

Compact and lightweight (4.4kg).

Atlas Powered Ascender APA-4

The APA-4 is the latest battery powered motorised ascender from Atlas Devices. It is rugged, battery operated and integrates into current SOPs using a broad spectrum of standard climbing equipment.

Whether operating at maritime depth, in a desert dust storm, or on the side of a remote cliff, the APA-4 brings new capability on a powerful, lightweight package to military and tactical operations. It is a multi-mission device that hauls heavy personnel loads, extends stamina, and reduces mission exposure.

Operating time is maximised with batteries that utilise the latest technology for both charging and discharge - a standard 3kg battery gives 210m / 700ft of ascent with a 115kg / 250kg load and the high capacity battery gives 420m / 1400ft of ascent on a single charge.



The batteries can be hot swapped both in and out of water. The batteries are non-volatile if punctured by ballistics. The batteries are compatible with the other motorised ascender in the Atlas range - the APA-5.

Atlas Powered Ascender APA-4 and APA-5

The standard APA-4 lifts up to 160kg / 350lbs directly and an integrated 2:1 attachment allows users to build mechanical advantage systems quickly and easily to lift loads up to 700 lbs. In addition to this there is also a heavy duty version of the APA-4 available that will haul 250kg / 550lbs directly whilst the system can be overridden in an emergency with a manual brake release that allows descent with no battery. Ascent and descent speed is easy to control and allows speeds of up to 66m per minute.

The device handles ropes from 6-11mm in diameter without changing the drive system and is kind to ropes in applying power so that sheaths are not stripped. The unit works on a wide variety of ropes from 6mm skinny Aramid lines to standard low stretch 11mm nylon and polyester ropes.



Whether operating at maritime depth, in a desert dust storm, 100' AGL in a helicopter, or live bonding transmission lines, the APA-5 is a smaller unit offering a force multiplier that effortlessly reduces time and exposure during vertical operations. Lightweight and powerful, the APA-5 lifts up to 600 lbs directly, handles ropes from 6.5-11mm in diameter, operates at maritime depth, and has a hot-swappable battery.

The APA-4 unit has been certified for operational use by the US DOD.

The Atlas APA-4 can be built up into bespoke packages with accessories such as a flotation jacket, wireless remote, hardcase, standard batteries and extended capacity batteries.

REBS® Ultralight Pole Ladder (UPL)

The Ultralight Pole Ladder (UPL) is REBS®'s latest single stile ladder which is lighter, easier to stack, carry, and stronger. Each UPL section is 1.7m and is molded using the latest in carbon fibre technology. The system can reach up to 11m when the top adapter, five sections of 1.7m, an optional single step and 1.5m Wire Ladder are all connected. The quick connectors and modular design make the system safe, fast and easy to assemble.

By attaching the 1.5m Wire Ladder, an extra 1.5m of height can be gained whilst also keeping the lowest step closer to the ground. In marine environments, the Wire Ladder also provides increased operational safety as the boarding craft will not be able to knock the ladder off its hold when riding on the waves. Operational efficiency is increased with rubber tipped standoffs which provide good space for hands and feet, help keep the ladder stable and minimise noise in use.



Quick connectors and modular design.

Can be used for RHIB, Dive and Urban operations.

A lightweight rigid section ladder that can reach 11m whilst being operated by one person.

Fully compatible with REBS® Tactical range of hooks, Single Step and Top Adapter.



REBS® Ultralight Pole Ladder Junior (UPL) and UPL Adapters

The REBS® UPL Junior is a half section of the Ultralight Pole Ladder that is optimised for urban use where the shorter length allows it to be packed / strapped to sack.

The UPL Junior uses exactly the same construction techniques as the standard UPL but is just 0.85m long.

The UPL Junior does not have the built in stand-offs in order for it to be packed as compactly as possible - instead it uses push in pins that act as stand-offs.

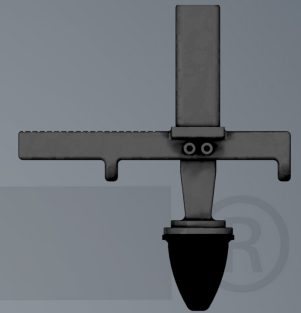
The UPL junior uses the same system components - hook adapter / bottom step / wire ladder - as the standard UPL.



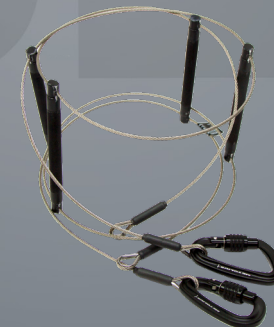
UPL Junior Section



Top Adapter



Single Step



REBS Wire Ladder 1,5m



REBS Hook Dual 6,8" Tactical

Atlas ATL Tactical Ladder

The Atlas Tactical Ladder (ATL) is a high strength aluminum collapsible bridging, ladder, litter system ideal for jump, maritime, and urban lean-to and hook and climb tactical access mission requirements. The ATL can be joined to reach heights of 15-18ft.

The ATL (Atlas Tactical Ladder) system features a sophisticated design optimised for an exceptionally high strength-to-weight ratio. This allows for durability, versatility, and minimum weight (4.5kg) without sacrificing strength or height.

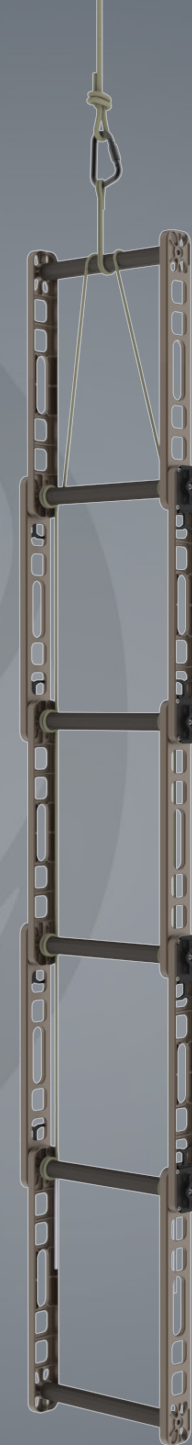
The ATL is the foundation of an ultralight Litter/Ladder/Bridge system designed for operators conducting austere special operations missions. Built on a core Atlas Devices ladder technology backbone, the ATL system combines the packable, height-conformable strength and tailor-ability of a ladder and bridge with the speed, efficiency, and security of a vertical/horizontal hoist-able patient litter. The integrated handle designs enable effective patient manipulation and longer duration carries which provide a multi-mission tool that is useful through all phases of operations.



Additional sections can be added to create a ladder up to 8.5m long.

The ATL is rated for loads between 180 and 360 kg depending on configuration. The 4.2m double section ladder weights less than 9.0kg. Additional sections can be added to create a ladder up to 8.5m long.

The 4.2m double section ladder weights less than 9.0kg.



Atlas ATL Tactical Ladder

The Ladder easily collapses down and the space within the frame can provide storage and protection for additional equipment. When collapsed, the system fits entirely within the torso's profile thus enabling unimpeded freedom of movement.

The innovative patented locking joint design enables not just the ability to rapidly deploy and stow the ATL, but also the ability to separate the assembly into smaller sections to optimise load carry and length. This means that the ATL systems weight can be distributed among several people and rapidly reassembled on site. It can also be configured for shorter lengths or deployed as several ladders, making it a single solution for many different missions. The ATL can be joined to reach heights of 5-6m.



The Atlas ATL Ladder joint locking system can be set to auto-locking mode for silent deployment. Compacting into a collapsed mode making it easy to handle.



REBS® SkyPole

The REBS® SkyPole is a pneumatic pole system with a reach of 20m based upon the REBS® Giraffe Tracer pneumatic pole system.

The Giraffe has been considered as the stiffest and best solution for boarding ships with more than 160 systems sold worldwide. The SkyPole has been developed on this extensive experience to create a design which features state of the art carbon fibre tubes, offering the best possible stiffness and weight ratio.

The SkyPole is constructed using carbon fibre technology which has been taken from the automotive industry, meaning the tubes are extremely stiff therefore increasing the operational safety and effectiveness. A hook can be safely locked into place allowing for safe extension of the pole. When the pressure in the pole is reduced, the hook can be unlocked and will release easily. This means that the hook can be released whilst the pole is standing vertically. The locking system mechanism allows the pole to be used in both harsh and extreme conditions with no risk to the hook detaching.

Typically used from a RIB (Rigid Inflatable Boat), the pole is used to place a hook and ladder on larger ships but it can also be used for land based operations. Due to the SkyPoles robustness, heavier tools and large ladders can be used.

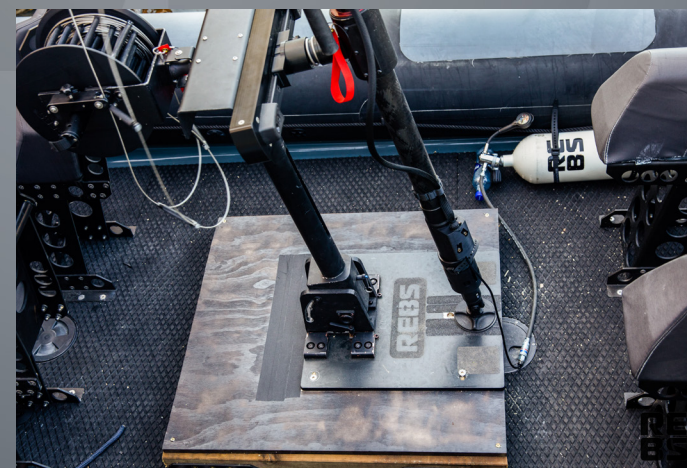


Excellent operational safety and effectiveness.

Safe and reliable hook connection.

Low centre of gravity and low weight.

High push and full force.



Tactical Training

Helix Operations deliver training in all aspects of vertical movement across all types of terrain. We utilise a core team of instructors who are experienced in operating tactically in these environments, our consultants experience covers tactical employment. Rescue and mountaineering ensuring our training is both current and relevant to the end user.

All our courses are tailored and refined to ensure they are pertinent to the end user because we are aware that no two situations or requirements are the same. We ensure that core skills and techniques are covered on all courses to ensure interoperability between organisations.

Our consultants hold the relevant military or civilian qualifications, we can if requested provide training and accreditation to the UK National Governing body standards.

Core skills:

- Vertical movement. The ability to move teams and individuals safely and efficiently through complex terrain.
- Micro rope systems. Micro rope systems in all environments; this provides a lightweight expeditionary capability for experienced users.
- Rope Rescue. We are accredited Rescue 3 provider able to provide internationally accredited Rope Rescue training that is appropriate to the tactical user.



CTOMS





Connect With Us



HELIX

Keep updated with Helix operations across platforms such as helixoperations.com, Tactical and Rescue Instagram accounts as well as LinkedIn. We share exciting information regarding products we manufacture ourselves as well as key products from brands we work with.

Stay informed with key innovations across all product ranges in the tactical and rescue field as well as new courses.

Our website lists our entire range, including any certifications, technical specifications, and variations of products. You can also find information regarding courses and training, including our accreditation.



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Helix Operations evolved out of DMM International when it became apparent that there was a need for a specialist company to support the government, tactical, and rescue markets.

DMM International has a global reputation as a leading manufacturer of superior height safety equipment and has supplied the UK and overseas military and government institutions with equipment since 1985. Growing demand for a broad range of complete, specialist systems where all components are selected and proven to work together led to Helix being founded on this broad wealth of expertise and experience. With a remit to bring together a portfolio of the best equipment, the resulting partnerships with companies such as REBS, CTOMS, and Atlas amongst others have allowed us to offer a complete capability for vertical access and rescue across Urban, Mountain, and Maritime environments.

Helix's mission is to provide the tactical end user with the very best equipment and systems for vertical access, egress, and rescue scenarios.

We understand that first class equipment is only one part of the equation, and that without a trained operator or enabler it is unlikely to be utilised to its true capacity. That is why Helix also offers training packages alongside systems and kit. Training can be delivered through a range of options; from standard courses for the operator, maintainer, or supervisor, through to bespoke courses covering specific scenarios. These training courses are either accredited by Helix or through external validation depending on the end user requirement and course syllabus.



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