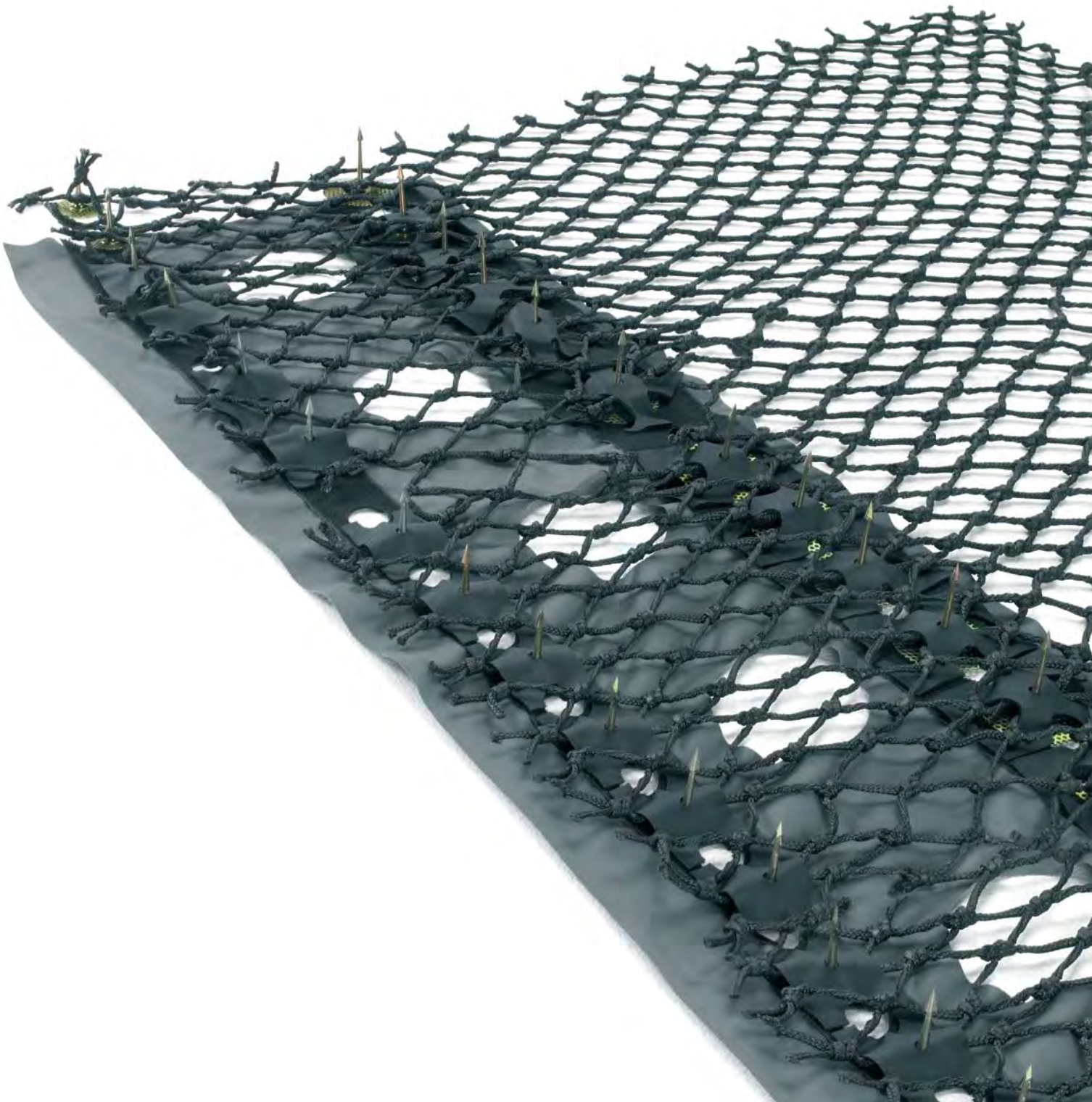


Exceptional vehicle stopping power.
Breakthrough technology.

X-Net[®]



X-Net[®] vehicle arresting system. It's amazing what our quick start can stop.

Time is of the essence in the circumstances where it's necessary to stop an escaping vehicle. In these demanding situations where fast reaction times are the key, deployment of the system needs to be rapid and simple. Its effects must be reliable. And the issue of safety of bystanders, those deploying the system and the vehicle's occupants, is never far away – an issue that goes hand in hand with minimising any damage to the target vehicle. The X-Net non-lethal, man portable system, with its unique spiked net design, can fully arrest a wide range of vehicles quickly and easily with the minimum of harm.



A head-on approach

Scientists and engineers have faced a serious challenge in finding a solution to stopping vehicles that brings them to a halt more rapidly and safely. Conventional systems have relied on puncturing tyres. The risk is that the vehicle has the potential to continue its progress for some considerable time and distance before coming to a halt. And be out of control. It's these issues, with the inherent dangers they carry, that QinetiQ scientists have addressed head-on. The result of this work is X-Net, offering distinct advantages over other systems.

The only system of its kind

X-Net is the only man portable, non-lethal vehicle arresting solution available today. It brings the target vehicle to a complete standstill, under control, irrespective of standard or flat run type tyres. Manually deployed in under 20 seconds, the X-Net employs a unique spiked net design. The barbed spikes in the leading edge of the net pierce the front tyres of the moving vehicle. The net then envelops the front tyres and is pulled tight under the vehicle to stop the wheels rotating and bring the vehicle to a standstill.

With over four thousand units in service worldwide, this tried and tested system has been adopted and endorsed to cope with the most demanding situations by both military and police forces.

Light weight. Heavy duty

Weighing only 22kg, X-Net[3t] is designed to stop vehicles up to three tonnes, with its larger version, X-Net[10t], capable of stopping vehicles up to 10 tonnes, both at 40mph. Its portability and rapid deployment capability easily outperform alternatives such as spike strips or electronic engine disruption – a method that's only effective on certain kinds of engine management systems.

Safety

QinetiQ has developed a Remote Deployment Device (RDD) for use in conjunction with the X-Net for checkpoint installations. It provides a safe stand-off distance for the user to deploy the X-Net, keeping them away from the potential danger zone. This RDD can be installed and ready to use in only 10 minutes without the need for supporting infrastructure. It can be used with both net types and in a variety of circumstances.

“The product is designed to determine intent and it has saved lives... It provides a non-lethal solution to stop vehicles at checkpoints that have failed to stop voluntarily... We have already developed a Remote Deployment Device that winches X-Net across the road in 1.5 seconds and is triggered by a foot pedal, keeping soldiers out of harm's way and leaving their hands free to hold weapons.”

Phil Dandy – X-Net Business Manager

X-Net in action

Its rapid set up and deployment capability makes X-Net particularly effective in a variety of circumstances where speed, safety and the capacity to bring vehicles to a halt over shortest possible time and distance are of the essence.

Applications

Setting up mobile checkpoints to control vehicle flow – specifically for peacekeeping operations and states of high terrorist alert

Cordoning off areas or roads to stop vehicles entering or leaving defined locations

Pursuit management – where specific vehicles can be targeted for arrest

Building and asset protection and pre-planned operations



Performance

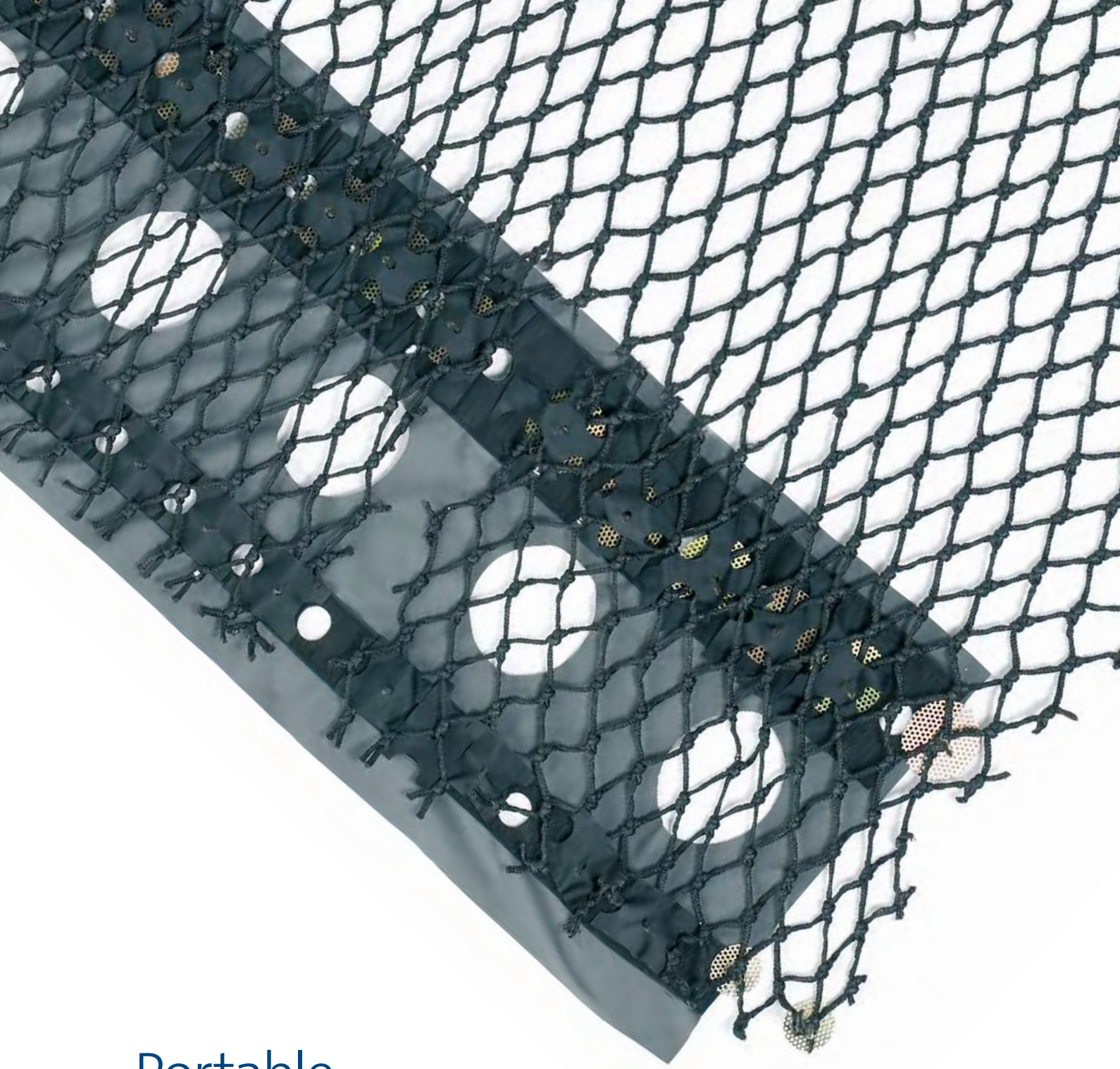
X-Net can arrest a vehicle within a similar distance to an emergency stop

The retardation force is less than 1g – providing a low risk to occupants

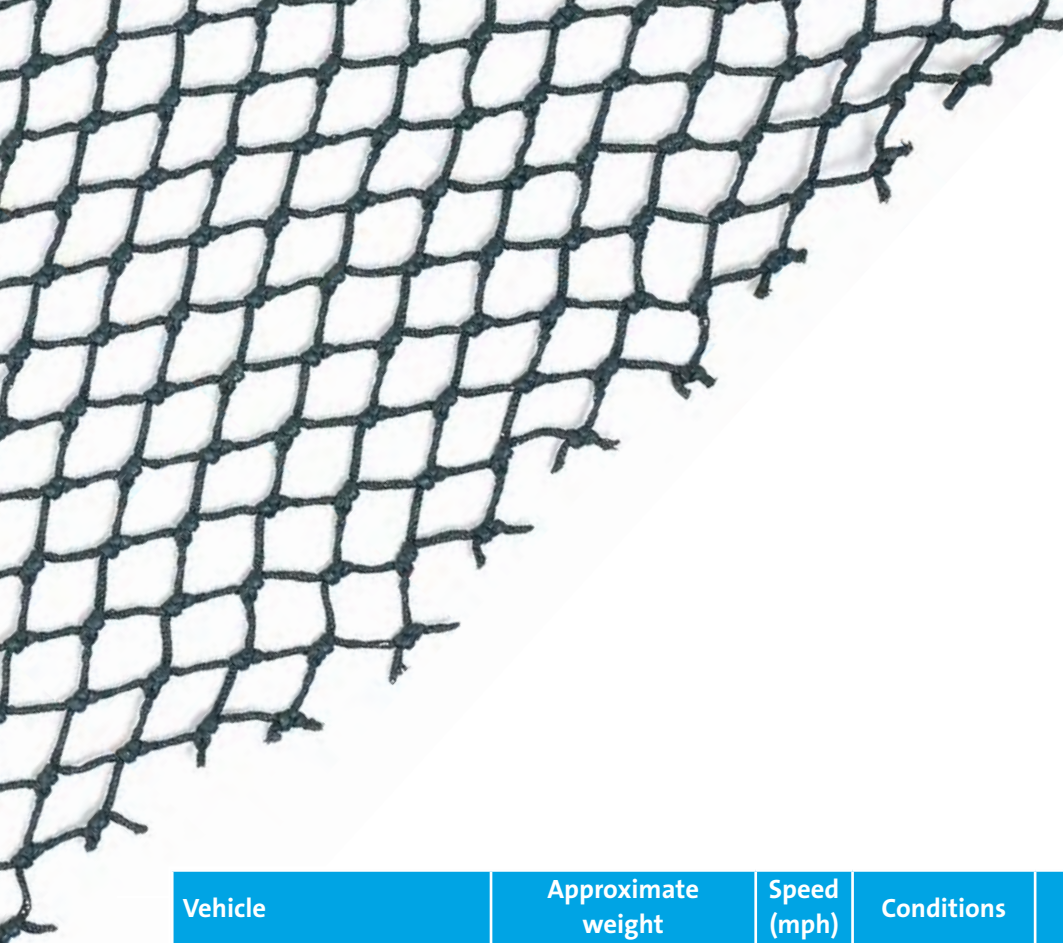
Larger vehicles can be stopped with X-Net[3t] stopping power effective up to 3 tonnes and X-Net[10t] effective up to 10 tonnes

‘QinetiQ had a strong track record of working on vehicle arrest systems, originally prompted by anti-terrorist activities in Northern Ireland... We were aware of the specific military and police requirements through our early work with the UK Ministry of Defence... The X-Net development team has a wide and impressive skill-set backed by an ability to pull in additional expertise from across the QinetiQ organisation...’

The U.S. Army on choosing X-Net



Portable
Quick
Effective
Safe



Vehicle	Approximate weight	Speed (mph)	Conditions	Net type	Stopping distance
Mazda 323	2403lbs (1090kg)	35	Off-road, Dry	X-Net[3t]	49ft (15m)
Saab 9000i	3106lbs (1409kg)	50	Dry	X-Net[3t]	148ft (45m)
Chevrolet Corsica	3126lbs (1418kg)	30	Off-road	X-Net[3t]	69ft (21m)
Ford Transit (RWD)	3505lbs (1590kg)	40	Dry	X-Net[3t]	148ft (56m)
Ford F150 Pickup	4650lbs (2109kg)	30	Dry	X-Net[3t]	151ft (46m)
Rover 827 (Armoured)	5210lbs (2363kg)	35	Wet	X-Net[3t]	164ft (50m)
GM HMMWV	5410lbs (2454kg)	30	Dry	X-Net[3t]	121ft (37m)
GM CUC-V Pick up	5911lbs (2681kg)	30	Dry	X-Net[3t]	246ft (75m)
Reynolds Boughton RB44	6614lbs (3000kg)	35	Wet	X-Net[3t]	105ft (32m)
MAN 14 244 Truck	22,659lbs (10,278kg)	30	Dry	X-Net[10t]	92ft (28m)
Renault Tracer R332 Coach	25,419lbs (11,530kg)	25	Dry	X-Net[10t]	180ft (55m)

Type	Deployed size	Description	Weight	Volume (litres)	NATO stock number
X-Net[3t]	19ft x 10ft (6m x 3m)	Lightweight system capable of stopping up to medium size trucks	48lbs (22kg)	114	4240-01-518-4626
X-Net[10t]	19ft x 16ft (6m x 5m)	Heavy duty system capable of stopping up to large size trucks	70lbs (32kg)	280	4240-01-5677307

X-Net is a life saver from every point of view. Used to arrest a car that had accelerated through a checkpoint in volatile Port-au-Prince, Haiti, not only was the vehicle brought to a halt within 50 feet, but without injury to the driver or the Marines on duty. In situations like this, where not a shot was fired, it's no wonder the Marine Commander was quoted as saying X-Net had worked precisely as intended: "There's one Haitian that's glad it did...X-Net is a keeper."



A far-sighted approach from a visionary company

QinetiQ has a global reputation for applying the finest minds to the most challenging of problems. Our groundbreaking defence and security technologies are applied and relied on every day, all over the world. Conceived, designed and developed by QinetiQ, X-Net's stopping power is just one of the breakthrough solutions to come from our team of hand-picked engineers and scientists.

Customer Contact Team
QinetiQ
Cody Technology Park
Ively Road Farnborough
Hampshire GU14 0LX
United Kingdom
Tel +44 (0) 8700 100 942
www.QinetiQ.com/X-Net

QinetiQ

© Copyright QinetiQ Ltd 2009
QinetiQ/CF/SS/PUB0900023

X-Net is a registered trade mark of QinetiQ Limited