

Specifications

Spartacus

- Operable in unmanned and manned modes
- Robotic Appliqué Kit installs onto Bobcat Skid Steer Loaders with SJC in 15 minutes or less
- Cameras: 6 fixed daylight/IR, 1 daylight/thermal PTZ
- Reconnaissance: 26:1 zoom camera daylight/FLIR and two-way audio
- Tactical Robotic Controller (TRC) 11 lbs (5kg)
- Laptop Control Unit (LCU) 17 lbs (7.7kg)
- Speed: travel speed up to 5.2 mph (8.4 km/hr)
- RF Range: 800 m line of sight
- User Interface: intuitive graphical user interface with real time system feedback
- Auxiliary fuel/water storage capacity
- 9500 LB Recovery Winch
- Spartacus ranges in size from 5,000lbs (2,270kg) to 12,500 lbs (5,675 kg)
- A lifting capability of 1,500 lbs (681 kg) to 10,000 lbs (4,540 kg) with a wide variety of Bobcat attachments
- Safety: Integrated wireless power interrupt system (WPIS), dedicated remote emergency stop command via controller

Minotaur (Spartacus variant)

- Front mine roller payload system installs in minutes
- Operating Height with Appliqué Kit: 98 inches (2,489.2 mm)
- Operating Width: 47.2 inches (1,199 mm)
- Endurance: over 24 hours of continuous operation
- Vehicle Mounted Battery Charger: allows on-site control unit battery charging
- Spartacus has proven to be a reliable robotic system when encountering Improvised Explosive Devices (IEDs), Anti-Personal (AP) mines, Unexploded Ordnance (UXO)

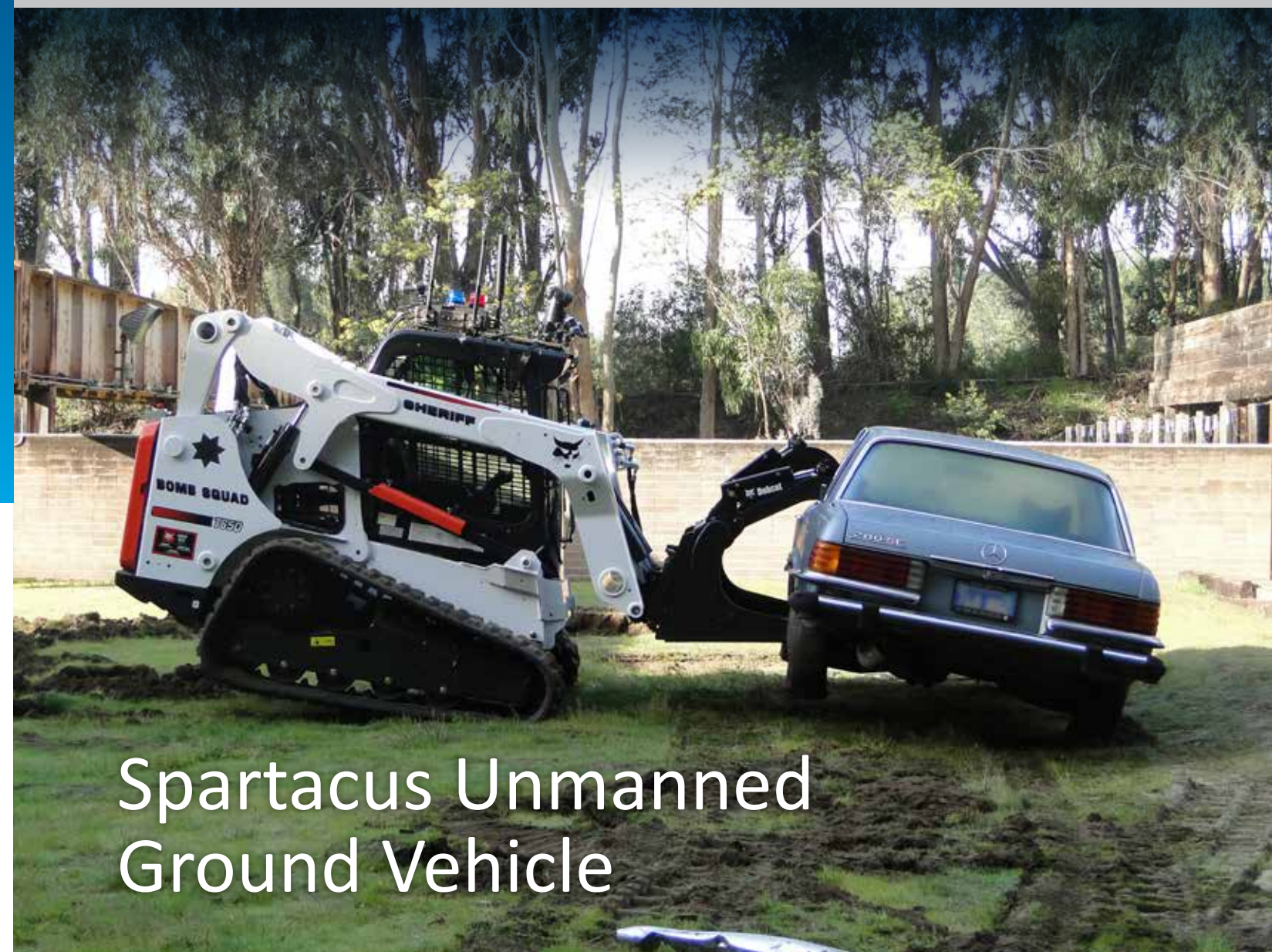
Robotic Appliqué Kit™ (RAK) and controllers

Transform any of the Bobcat family of Selectable Joystick Controlled (SJC) Skid Steer Loaders into a remotely operable Spartacus robotic system in 15 minutes by trained operator or technicians.

The RAK system includes

- Six fixed focus, auto infrared (IR) cameras and one pan/tilt/zoom Camera
- Wide range of camera housing positions
- Choice of two (2) pan/tilt/zoom (PTZ) cameras; Rugged IR PTZ camera with 360 degree continuous rotation and 36:1 zoom or the GeminEye PTZ with Thermal and 26:1 zoom
- Microphone
- Two operator control units (OCU); Tactical Robotic Controller™ (TRC) (a wearable controller) as well as a hardened Laptop Controller
- Selector switch which easily allows the system to be switched from “Manned Operation” to “Unmanned Operation”
- Over 80 Bobcat Skid Steer Loader attachments that are controllable from the RAK Operator Control Unit

Under remote control operations, in some of the world's most difficult conditions, giving the operator a stand-off distance up to 800 meters.



Spartacus Unmanned Ground Vehicle



QinetiQ North America's large vehicle unmanned robotic systems are ready to support your needs with remote platforms that keep your personnel safe.

Spartacus™



Spartacus is a family of remotely operated Bobcat® skid steer loaders. Using the QinetiQ North America RAK system, they can be transformed into an optionally unmanned ground vehicle in less than 15 minutes.

Spartacus ranges in size from 5,000 lbs (2,270 kg) to 12,500 lbs (5,675 kg), a lifting capability of 1,500 (681 kg) to 10,000 lbs (4,540 kg) with a wide variety of Bobcat attachments.

The Tactical Robotic Controller (TRC™) is a lightweight, wearable controller that allows the operator to control a family of unmanned ground vehicles (UGVs).



Minotaur

U.S. Army Minotaur is a remote controlled Bobcat T110 diesel powered skid steer loader equipped with a Robotic Appliqué Kit (RAK™), a TARDEC designed anti-personnel mine roller and a rake system to seek out and unearth command wires.

Using QinetiQ's TRC, the dismounted warfighter can maneuver Minotaur from more than 800m away in order to identify and defeat IEDs.

RAK offers a wide range of camera housing positions and magnetic mounts to allow operator to configure as needed. The Minotaur and Spartacus can be equipped with a Two Way Hailer system containing a Microphone which enables the robot operator to listen to ambient sounds at the vehicle and a speaker to bellow commands.



QinetiQ North America's robots (Spartacus and TALON) at Japan's Fukushima Nuclear Power Plant following the March 11, 2011 earthquake and tsunami



WCA High Powered Optical 36X Zoom with 360 degrees of continuous rotation



MOOG GeminEye Pan Tilt Zoom offering extreme condition (-25.6 F to 131 F) 26X Zoom with Thermal modular camera modules



Spartacus Mission

- Keeping operators at a safe distance
- Wide variety of tactical and disaster relief mission capabilities Tactical Team aid
- Hazmat Redemption

Minotaur Mission

- Keeping operators at a safe distance
- Route and path clearance / IED defeat missions
- Mule for dismounted war fighters
- Battery recovery station
- Message delivery system (Loud Hailer)