

Self-powered, connected SmartBoots deliver critical visibility and situational awareness for first responders.

**ABOUT:** When emergencies occur, first responders often encounter chaos, smoke, fire and dangerous conditions. SolePower is developing a platform to access location, status and environmental conditions in an integrated, interoperable system in a boot.



**TECH:** SmartBoots is part of a system that establishes real time visibility and situational awareness for first responders. At the core of the system is an Army-tested patented kinetic charger which uses walking motion to sustainably charge multiple sensors embedded inside the boot. Multiple sensors collect data with critical information such as temperature, range and proximity. Pilot unit includes GPS, RFID, Sub-GHz RF, inertial motion sensors, thermocouple, Wifi and altimeter. The core tech is covered by two patents.

**PARTNERSHIPS:** SolePower is partnering with leading manufacturers of firefighter and industrial footwear including SR MAX, Vibram and Wolverine. Other relationships include the US Army Power Division at CERDEC, Carnegie Mellon University and Toyota.

**ADVANTAGES:** SolePower SmartBoots incorporate the functionality of a variety of other stand-alone wearables into a compact, self-charging platform. The SolePower system uniquely works without being charged. Motion sensors located on the boot offer accuracy improvements for GPS-denied location-tracking and fall/trauma detection. Additionally, the insights and data will be invaluable to analysis and reporting.

**SEEKING:** SolePower will partner with leading safety manufacturers to develop the platform and embed the system into first responder boots as part of an integrated and interoperable safety platform.



White House Demo,  
Toyota Mother of Invention



Strategic partnerships with  
industrial footwear leaders



Completion  
of two contracts



Funding from angels,  
NSF and SBIR