The Situation: Most new soldiers and first responders have received first aid training, but are not prepared for the intense reality of a trauma incident. Situations ranging from gunshot wounds to IED explosions can be horrific to experience. A major part of this is intense bleeding. The uninitiated or ill-prepared can hesitate and, therefore, have a catastrophic effect on the victim where seconds are the difference between life and death. Only good training can overcome the natural reaction to hesitate and lose precious seconds in such intense situations. However, most of the realistic training devices and techniques available today are too expensive, delicate and generally reserved for the training of doctors and nurses. There is a great need for rugged and inexpensive training devices that mimic reality in order to train larger numbers of Soldiers and first responders to handle the pressure of life and death situations. The FEBSS satisfies this need.
The FEBSS HydraSim™ recreates active bleeding on real people while doubling as a common hydration pack. The HydraSim can be worn on the outside of the uniform while the simulated drink tube is routed underneath the uniform. The entire system is self contained and allows for independent wireless control of two venous and two arterial bleeds. Each blood line can be manually adjusted allowing the user to increase or decrease the blood flow as desired. The compact design of the HydraSim allows it to be worn underneath the uniform if needed.

The FEBSS Impact Simulation Trainer (FIST)™ is available as an optional upgrade capable of integrating directly into the HydraSim. The FIST recreates the auditory impact associated with the point of wounding. Instead of using pyrotechnics or CO2, the FIST uses low level air pressure and common examination gloves to recreate the sound of impact. This allows the user to quickly and safely conduct simulation exercises over and over again minimizing effort and costs.

The HydraSim is designed to be used in conjunction with virtually any type of training mannequin. The HydraSim is attached outside of the mannequin giving old equipment new life (i.e. Rescue Randy – Simulaids). The HydraSim has insertion capability for virtually any type of hollow training mannequin (i.e. Crash Kelly – Laerdal). FEBSS Mannequin Modification Kits increase durability of hollow mannequins and allow for joint articulation during bleeding simulation.