

Testing a standard issue mine boot using the Frangible Surrogate Leg, composed of materials that react to blast in a manner similar to human tissue.



photos by DRES Photo Instrumentation Group



- A prodger that can distinguish between rock and the metal or plastic surfaces characteristic of mines is in development. This device would speed up mine clearance by reducing the time spent investigating false alarms.
- Advances in signal processing and a better understanding of the influence of soil conditions could enhance the performance of metal detectors.
- *Protection*  
To define the threat from anti-personnel mines and the hazard they pose to deminers, the CCMAT conducts fundamental research in blast physics and investigates the means by which injuries are caused. The data are used to develop and test computer models that predict injury in

various mine clearance positions (standing, kneeling or prone) and the requirements for protection in each. With this information, companies can design and develop better protective equipment. Prototypes are tested at the CCMAT and the data collected are used to refine and improve the design of protective equipment.

- *Enabling technologies*

The CCMAT is developing a series of demonstrators to showcase mine clearance technologies and to assess their potential performance. Three demonstration systems are planned, one each for vegetation clearance, mechanical neutralization and area detection scanning. Where possible, the systems will use existing technology, such as tele-operation