



WEARABLE MACHINES

A gas-powered robotic uniform inches closer to the battlefield.

The military garb designed by mechanical engineer Homayoon Kazerooni at the University of California, Berkeley, is anything but standard issue. Kazerooni's 90-pound battlesuit, dubbed BLEEX for Berkeley Lower Extremity Exoskeleton, consists of a pair of robotic legs and backpack-like frame. Wearing the prototype, a soldier can haul up to 75 extra pounds with little effort. BLEEX is still a far cry from the superhuman combat gear envisioned by the Defense Advanced Research Projects Agency, which is funding the research. But BLEEX 2, due out in late 2005, should be faster, lighter and more limber.—TREVOR THIEME



Badgers threaten sites around Stonehenge, but the British government promises not to cull the animals.



THE ULTIMATE YES



35TH ANNIVERSARY COLLECTION



4 BODY LAN More than 40 sensors are spaced throughout BLEEX's robotic legs to gauge the direction in which the legs are being pushed. Data is gathered by a nearby computer module and relayed through a "body LAN" to a central processing center in the backpack. A control algorithm then calculates how the pilot is moving, and commands the leg actuators to follow in stride.