N308. Making Tracks to Clean-Up After Accidents

After carrying out three years of development work, MAK systems GmbH in Kiel, Germany, is scheduled to hand over a prototype of its heavy manipulator vehicle to the company that commissioned it - Kerntechnische Hilfsdienst GmbH (KHG) - in March 1994. Designed to work in life-endangering environments, the remote-controlled mobile handling system could be used to cleanup after accidents or to help decommission and decontaminate nuclear installations.

The vehicle is well protected against aggressive gases and aerosols, heat, and radioactivity. It can travel at a speed up to 10 km/h and climb 40 cm steps. The system's six-axis hydraulically driven robotic arm is controlled from the stand with a joystick. With a span of 3m, the arm can move loads up to 250 kg. A stereo camera mounted on the vehicle observes manipulator tool operations and sends pictures to the mobile control stand as a three dimensional image. The manipulator vehicle can operate in direct radio communication up to 1 km away from the control stand.

For more, "Making Tracks to Clean-Up After Accidents," Nuclear Engineering International, p. 26, March 1994.