

MODERN TECHNOLOGIES FOR REMOTE CONTROL OF DETECTION AND DETOXIFICATION OF EMERGENCY CHEMICALLY HAZARDOUS OBJECTS AND ZONES

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Abstract – The technical research studies on robotic facilities designed for detection and elimination of accidents at chemically hazardous objects and adjacent areas are analyzed, basing on domestic experience in creating and using special-purpose robotic equipment. A possibility of creating a mobile robotic complex operating in accident zones involving hazardous chemicals is evaluated. The requirements for a mobile robotic complex aimed at detection and evaluation of hazardous chemicals are justified, including those for cleaning up contaminated areas. A series of proposals are suggested for creating a remotely controlled technical system for detecting and cleaning up chemically hazardous facilities and zones.

Keywords: robot, robotics, mobile robotic system, cleaning up chemically hazardous objects and zones, emergency response.