



U.S. ARMY



STATUS: ALL CONNECTIONS STABLE



Lessons Learned from A Decontamination Accident

U.S. Army Joint Munitions Command Safety Office
(Mission Support Services, LLC)



Lessons Learned From A Decontamination Accident

- In March 2011, an explosion occurred in an Army ammunition production facility.
- The explosion involved an unknown quantity of small arms smokeless powder.
- The accident occurred while a subcontractor employee was drilling a hole into a piece of steel tubing that was part of the frame of an equipment table.
- The explosion occurred when the drill bit penetrated the tubing igniting propellant inside the cavity of the table framework.

Ready – Reliable – Lethal!





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Lessons Learned From A Decontamination Accident

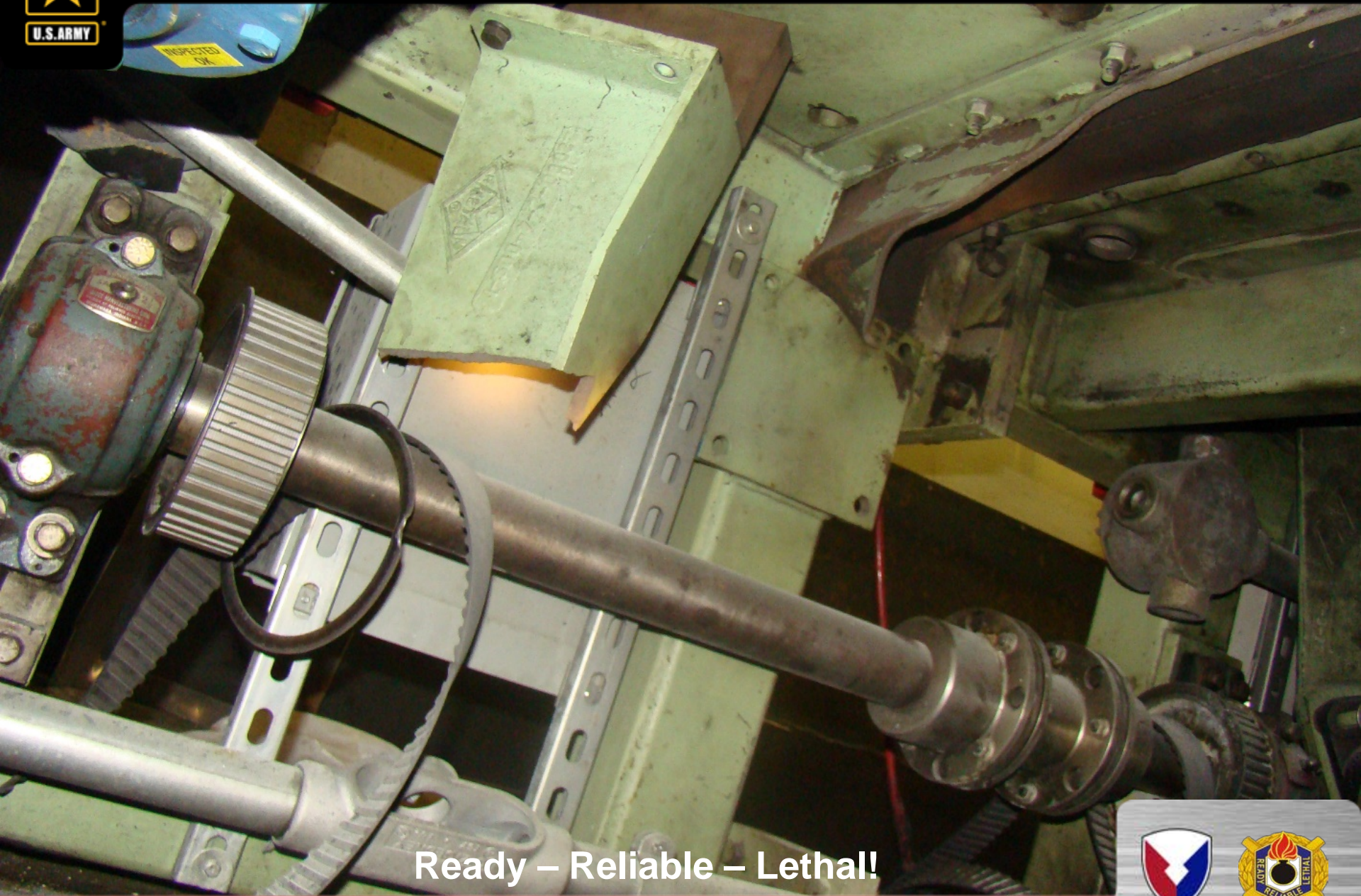


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Lessons Learned From A Decontamination Accident

- **Lessons learned from this accident include:**
 - **1. Identify all potential hazards** – Thorough hazards analyses are essential. In this case, the potential for explosives contamination inside hidden cavities in the table framework was not recognized.
 - **2. Follow Contractual Requirements** – Contractor personnel released contaminated equipment outside government control in violation of contractual requirements.

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- **3. Report all accidents and incidents** – Another incident resulting from inadequate decontamination of another area occurred less than 30 days prior to this accident. Proper reporting might have prevented this accident.
- **4. Proper training, knowledge, and skills** – Ensure individuals responsible for writing, reviewing, approving procedures (including Letters of Instruction (LOI)) have the required training, knowledge, and skills. In this case, an LOI was developed, approved, and implemented (after a near miss incident) that required subcontractor personnel to perform decontamination of equipment without the required training or experience).

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- **5. Ensure personnel have the necessary “hot work” permits** – In this case, subcontractor personnel were operating power tools without the required “hot work” permit.
- **6. Equipment designs should avoid hidden spaces where contamination might not be evident.** In this case, use of steel tubing rather than channel/angle/I-beam resulted in opportunities for hidden contamination.

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Questions ??

