DEPARTMENT OF THE ARMY
OFFICE OF THE CHIEF OF STAFF
200 ARMY PENTAGON
WASHINGTON DC 20310-0200

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MEMORANDUM THRU DIRECTOR OF THE ARMY STAFF, 200 ARMY PENTAGON, WASHINGTON, DC 20310

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SUBJECT: Eliminate Hazards through Design Selection

1. Summary: The Army is aggressively and actively reengineering its acquisition processes and simultaneously implementing them as we undergo the most rapid and significant transformation in recent history. It will be critical that we stay firmly committed to providing the safest equipment to our Soldiers and pass on the least risk to them by attacking hazards early and designing them out whenever possible. Uncontrolled hazards allowed to persist through the life cycle of a system will produce unintended consequences for years and generations of Soldiers. It is equally important we ensure where hazards cannot be eliminated that we have processes to identify them, to assess the associated residual risks and to formally accept them at the appropriate levels. As the revision of AR 385-16 is staffed and published this year, we will be working hard to ensure these precepts are clearing stated and integrated. The purpose of this memorandum is to reinforce some of those basics.

2. The primary objective of system safety in materiel acquisitions is to ensure hazards are eliminated or controlled through design and that risk associated with residual hazards is formally identified, accepted by the appropriate management decision level, and documented. The first and foremost effort must be to eliminate the hazards through design, failing the ability to re-design we must incorporate safety devices; provide warning devices; and then as a last resort develop procedures and training. Use of procedures and training as a control is extremely susceptible to human error and truly should be a last resort option. Our accident histories are full of human errors where procedures and training were controls applied to the hazard. The real savings in human life and readiness occurs early in the life cycle of a system. Even commercial-off-the-shelf items can be improved through the use of safety devices and through limited modification.

3. In the interim, I ask that we all push hard for design solutions that will eliminate hazards. In those cases where this is simply not possible, your risk assessments must reflect and document the appropriateness of using procedural controls. The use of procedures and training to mitigate risk affect the probability of occurrence but generally do not reduce the severity. It is important we not overestimate the effectiveness of procedures and training in controlling hazards.

4. The POC for this action is Mr. William Edmonds, DSN 558-1122, William.Edmonds@safetycenter.army.mil ; ATTN: CSSC-OG, Ft. Rucker, AL 36362-5363.

JOSEPH A. SMITH
Brigadier General, US Army
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