Army Regulation 385–10

Safety

The Army Safety Program

Headquarters
Department of the Army
Washington, DC
23 August 2007

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SUMMARY of CHANGE

AR 385-10
The Army Safety Program

This major revision dated 23 August 2007-

- Clarifies safety policy and responsibilities Armywide (para 1-4 and 1-5).
- Provides safety strategic planning, structure, and evaluation (paras 2-1 through 2-12).
- Clarifies safety committee and councils guidance (paras 2-13 through 2-25)
- Provides procedures and policy for safety accident investigation, reporting, and investigation boards (chap 3).
- Adds Army policy on integrating safety into the contracting process (chap 4).
- Provides explosive safety policy for commanders with ammunition or explosives (chap 5).
- Adds recreation and seasonal safety guidance for public, Family, and off-duty Soldiers (chap 6).
- Defines radiation safety management policy (chap 7).
- Adds Army safety awards program (chap 8).
- Prescribes policies and procedures for Army system safety management (chap 9).
- Establishes training requirements for safety support of Army operations for leaders and Career Program 12 personnel (chap 10).
- Adds the U.S. Army Combat Readiness Center Web site and the Combat Readiness University as a source for safety training (para 10-11).
- Establishes policy and requirements for motor vehicle accident prevention of Army personnel in privately owned vehicles, Army motor vehicles, Army combat vehicles, and combat tactical vehicles (paras 11-1 through 11-8 and para 11-10).
- Provides guidance on motorcycle safety (para 11-9).
- Adds minimum safety requirements for Army force mobilization missions (chap 12).

- Adds safety requirements during training, tactical, and contingency operations (chap 13).
- Establishes safety requirements for cargo operations by all transport modes (chap 14).
- Provides responsibilities and policy for Army aviation safety management (chap 15).
- Provides policy for implementation of the OSHA program (workplace safety) (chap 16).
- Adds policy on Army safety programs with emphasis on hazard recognition and workplace inspections (chap 17).
- Adds principles of industrial operational safety (civil works) (chap 18).
- Prescribes Department of the Army safety policy for emergency planning and response (chap 19).
- Establishes Army biological safety policy and procedures for operations of etiologic agents (chap 20).
- Changes the biosafety level facility pre-operational survey requirements (para 20-9).
- Provides policy for the Army chemical agent safety management program (chap 21).
- Adds guidance on establishing and operating an effective Marine activities safety program (water operations, civil work marine and water activities) (chap 22).
- Provides guidance on a medical safety program (chap 23).
- Adds requirements to establish safe facility reuse or closure activities (chap 24).

Headquarters
Department of the Army
Washington, DC
23 August 2007

*Army Regulation 385–10

Effective 23 September 2007

Safety

The Army Safety Program

By Order of the Secretary of the Army:

GEORGE W. CASEY, JR.
General, United States Army
Chief of Staff

Official:

JOYCE E. MORROW
Administrative Assistant to the
Secretary of the Army

History. This publication is a major revision.

Summary. This regulation provides new policy on Army safety management procedures with special emphasis on responsibilities and organizational concepts. It implements requirements of the Occupational Safety and Health Act of 1970 as implemented in EO 12196; 29 CFR 1960; DODI 6055.1; DODI 6055.4; and DODI 6055.7.

Applicability. This regulation applies to the Active Army, the Army National Guard/Army National Guard of the United States, and the U.S. Army Reserve unless otherwise stated. Also, it applies to Army civilian employees and the U.S. Army Corps of Engineers and Civil Works activities and tenants and volunteers in accordance with Section 1588, Title 10, United States Code and AR 608–1.

Proponent and exception authority. The proponent of this regulation is the Chief of Staff, Army. The proponent has the authority to approve exceptions or waivers to this regulation that are consistent with controlling law and regulations. The proponent may delegate this approval authority, in writing, to a division chief within the proponent agency or its direct reporting unit or field operating agency, in the grade of colonel or the civilian equivalent. Activities may request a waiver to this regulation by providing justification that includes a full analysis of the expected benefits and must include a formal review by the activity's senior legal officer. All waiver requests will be endorsed by the commander or senior leader of the requesting activity and forwarded through their higher headquarters to the policy proponent. Refer to AR 25–30 for specific guidance.

Army management control process. This regulation contains management control provisions and identifies key management controls that must be evaluated (see appendix C).

Supplementation. Supplementation of this regulation and establishment of command and local forms are prohibited without prior approval from the Chief of Staff, Army (DACS–ZA), 200 Army Pentagon, Washington, DC 20310–0200.

Suggested improvements. Users are invited to send comments and suggested improvements on DA Form 2028 (Recommended Changes to Publications and Blank Forms) directly to Director, Army Staff (DACS–SF), 200 Army Pentagon, Washington, DC 20310–0300.

Committee Continuance Approval. The Department of the Army Committee Management officer concurs in the establishment and/or continuance of the committee(s) outlined herein, in accordance with AR 15–1, Committee Management. The AR 15–1 requires the proponent to justify establishing/continuing its committee(s), coordinate draft publications, and coordinate changes in committee status with the Department of the Army Committee Management Office, ATTN: SAAA–RP, Office of the Administrative Assistant, Resources and Programs Agency, 2511 Jefferson Davis Highway, Taylor Building, 13th Floor, Arlington, VA 22202. Further, if it is determined that an established "group" identified within this regulation later takes on the characteristics of a committee, the proponent will follow all AR 15–1 requirements for establishing and continuing the group as a committee.

Distribution. This publication is available in electronic media only and intended for command levels A, B, C, D, and E for the Active Army, the Army National Guard/Army National Guard of the United States, and the U.S. Army Reserve.

*This regulation supersedes AR 385–10, dated 29 February 2000; AR 385–16, dated 2 November 2001; AR 385–61, dated 12 October 2001; AR 385–64, dated 1 February 2000; AR 385–95, dated 10 December 1999; AR 11–9, dated 28 May 1999; AR 672–74, dated 28 April 1995; AR 385–40, dated 1 November 1994; AR 385–69, dated 31 December 1993; AR 385–14, dated 8 April 1991; and AR 385–55, dated 12 March 1987.

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Glossary

Part One
Army Safety Program Management Functions

Part One of this regulation addresses general Army Safety Program management functions necessary for sustaining all phases and operations of the Army whether at the garrison, in contingency operations or wartime conditions. Part Two, starting at chapter 12, addresses those special Army Safety Program management functions that are specific to supporting the Soldier during training, mobilization, tactical, and field operations in the garrison or during contingency and wartime conditions. Part Three, beginning at chapter 16, addresses safety functions supporting the garrison and industrial base. Throughout this regulation, the term "Army Headquarters" includes Army Commands (ACOMs), Army Service Component Commands (ASCCs), Direct Reporting Units (DRUs), and the National Guard Bureau (NGB).

Chapter 1
Army Safety Program

Section 1
Introduction

1–1. Purpose

This regulation prescribes Department of the Army (DA) policy, responsibilities, and procedures to safeguard and preserve Army resources worldwide, to include Soldiers, Army civilians, and Army property against accidental loss. It establishes composite risk management (CRM) as the Army's principal risk reduction methodology and assures regulatory and statutory compliance. It provides for public safety incident to Army operations and activities.

1–2. References

Required and related publications and prescribed and referenced forms are listed in appendix A.

1–3. Explanation of abbreviations and terms

Abbreviations and special terms used in this regulation are explained in the glossary.

Section 2
Responsibilities

A successful Army Safety Program depends upon everyone fulfilling his or her safety responsibilities. Safety responsibilities fall into 2 categories— general and specific program–supporting responsibilities.

1–4. Specific Army Safety Program responsibilities

a. Secretary of the Army. The Secretary of the Army (SA) will serve as the Department of Defense (DOD) executive agent for emergency response to transportation accidents involving munitions and explosives.

b. Assistant Secretary of the Army (Installation and Environment). The ASA(I&E) will—

(1) Provide oversight for all DA matters related to safety and occupational health.

(2) Set the strategic direction, determine the objectives, establish policy, set standards, and propose programming and funding for these programs.

(3) Provide policy, oversight, strategic planning and direction, and strategic goals and metrics for the Army Safety Program, including safety policies and standards for Army explosives, biological research, radiological and chemical agent programs, and CRM process.

(4) Approve, plan, program, and budget for safety programs and activities.

(5) Initiate program reviews, taskings, studies, and evaluations to ensure the Army Safety Program adheres to DA and DOD safety and occupational health policies, strategic goals, and complies with statutory requirements and national standards.

(6) Serve on boards, committees, and other groups pertaining to safety and occupational health as required by this regulation.

(7) Represent SA on safety and occupational health matters outside DA.

(8) Serve as the functional Chief for Safety and Occupational Health Management Career Program.

(9) Develop guidelines for the Safety and Occupational Health Management Career Program.

(10) Review and evaluate the execution and performance of the Safety and Occupational Health Management Career Program.

(11) Approve policies and procedures for the safe disposal of nonstockpile items found on Army installations of formerly used Defense sites (FUDS) and establish policy for compliance with environmental laws and regulations for real property containing ordnance and explosives, including on Army ranges.

(12) Provide oversight of the environmental, safety, and occupational health aspects of the Chemical Demilitarization Program, treaty compliance review, and chemical stockpile emergency preparedness.

(13) Develop policies and procedures for non–acquisition guidance of the Chemical Demilitarization Program.

(14) Develop overall Army policy for safe operation of motor vehicles.

(15) Provide policy, direction, and oversight to ensure the acquisition, operations and maintenance, rehabilitation, and modernization of facilities employ construction and facilities systems safety (FASS) engineering and management to optimize safety and health throughout the life cycle. This is done through the Assistant Chief of Staff for Installation Management (ACSIM) and the Corps of Engineers.

(16) Synchronize safety and occupational health direction and initiatives across the Army and with the Secretary of Defense.

(17) Exercise policy and program oversight for the SA for transportation accidents involving munitions and explosives.

c. Assistant Secretary of the Army (Acquisition, Logistics and Technology). The ASA(ALT) will—

(1) Ensure program executive officers and project managers implement system safety procedures during materiel development phases.

(2) Oversee the Chemical Demilitarization Program.

(3) Provide documentation of system safety reviews and recommended corrective actions for DA–level in–process reviews.

(4) Ensure safety is maximized in weapons system research, development, test, and evaluation (RDT&E), and acquisition, to include development of acquisition plans, strategies, guidance, and assessments for future weapon systems, as well as munitions that support sustainable ranges.

(5) Evaluate material and design alternatives that reduce the potential for environmental impacts from current munitions, and ensure they meet mission–safety performance standards.

(6) Monitor the research, development, testing, evaluation, distribution, and fielding of Army explosives ordnance disposal (EOD) equipment and the procurement of all Army EOD specific equipment and ammunition.

(7) Integrate, coordinate, and manage efforts to increase effectiveness of biological technologies, material research, and the development and acquisition program.

(8) Review and validate all future biological RDT&E facility construction or renovation requirements before any organization initiates construction or renovation programs.

(9) Oversee the materiel acquisition management of the Army Industrial Safety Program for ammunition.

(10) Be responsible for policy for in–transit arms, ammunition, and explosives safety.

(11) Be responsible for assuring the planning, programming, and budgeting for the safety hazard assessment of Army materiel and systems throughout the full life cycle of these items.

d. Chief, Public Affairs. The Chief, Public Affairs will—

(1) Support the development and execution of stakeholder involvement plans and outreach programs necessary to implement safety policy established by ASA(I&E) and the Director of Army Safety.

(2) Assure the development of policies and procedures to assist safety staffs and personnel in the effective communication of safety risks.

(3) Advise and counsel Army leadership on public response to accidents and incidents.

e. Deputy Chief of Staff, G–1. The DCS, G–1 will—

(1) Support safety policy and procedure development.

(2) Implement policy with advocacy for Soldier–oriented research and development, including issues in manpower, personnel, training, human factors engineering, health hazards, systems safety, and Soldier survivability.

(3) Ensure systems safety is integrated into materiel development and acquisition phases through the Manpower and Personnel Integration (MANPRINT) Program; include safety concerns and issues on Army materiel in MANPRINT assessments and presentations at the Army System Acquisition Review Council.

(4) Integrate system safety and health hazard reviews into MANPRINT.

f. Deputy Chief of Staff, G–3/5/7. The DCS, G–3/5/7 will—

(1) Establish policy, standards, and procedures for the physical security of chemical weapons.

(2) Establish operational controls for chemical agents, munitions, and related weapons systems.

(3) Establish policy, standards, and procedures for inspections of storage depots, demilitarization facilities, contractor operations, and commands or agencies with chemical agent oversight responsibilities.

(4) Verify the safe disposal, demilitarization, and decontamination of chemical agents and munitions.

(5) Ensure safe transit of arms, ammunition, and explosives.

(6) Act as focal point for chemical agent matters in the Army.

(7) Develop and implement policy and procedures governing the selection, training, testing, and licensing of Army motor vehicle (AMV) operators.

(8) Establish procedures for the Army Flight Standardization Program.

(9) Procure non–standard ammunition approved by Program Executive Office, Ammunition (PEO, Ammo) and requested by commanders of ACOMs, ASCCs, DRUs, and Chief, NGB.

(10) Provide overall staff responsibility for emergency response support — provided under this regulation — and for transportation accidents involving munitions and explosives.

g. Army Operations Center. The Army Operations Center (AOC) will—

(1) Serve as the DOD coordination center for emergency response to transportation accidents in the continental United States (CONUS) involving munitions and explosives.

(2) Determine the military installation nearest the accident and task the installation to provide immediate assistance and/or support, and will notify the appropriate military department to contact the installation.

(3) Task U.S. Army Forces Command (FORSCOM), Operations Center, to arrange for EOD service/support from the nearest EOD unit regardless of the service affiliation.

(4) Notify Headquarters, Military Surface Deployment and Distribution Command (SDDC) and the Department of Transportation (DOT) of all transportation accidents involving munitions and explosives.

h. Deputy Chief of Staff, G–4. The DCS, G–4 will—

(1) Develop policy for safety in demilitarization of ammunition and explosives.

(2) Manage the Hazardous Materials Information Resource System.

(3) Integrate explosives safety requirements into ammunition and explosives storage construction programs.

(4) Ensure the safety of chemical agents and munitions during renovation, maintenance, and chemical agent cleanup operations.

(5) Establish and maintain procedures for safety–of–flight restrictions for Army aircraft and safety–of–use restrictions for other Army materiel.

(6) Charter the Army Safety Action Team (ASAT), serve as the chairperson of the ASAT, and maintain and distribute a list, by name, of principal ASAT members and action officers.

(7) Develop policy and guidance for aircraft weight and balance.

(8) Develop policy and guidance for the aviation life–support equipment program.

(9) Develop guidance and policy for non–standard aircraft equipment program.

(10) Develop guidance and policy for non–standard aircraft.

(11) Oversee DA transportation services required for safe movement of conventional ammunition and explosives.

(12) Manage the Army EOD program.

i. Assistant Chief of Staff for Installation Management. The ACSIM will—

(1) Establish centralized authority at each installation for workplace safety and Army civilian accident prevention.

(2) Develop and provide programming guidance to Army Headquarters and installations to support implementation of the provisions of this regulation appropriate to the installation Program Evaluation Group.

(3) Conduct dialogues with interested members of the public, regulators, and other Federal and state agencies to address safety issues.

(4) Establish centralized authority at the installations to manage vehicle (privately owned vehicle (POV)) safety programs, and traffic safety.

(5) Develop procedures for and implement the Army's motor vehicle accident prevention program.

(6) Develop procedures to collect and report motor vehicle accident prevention surveys and reports required by SA and DOD.

(7) Establish an impaired and fatigued driving prevention program.

(8) Establish and resource driver training centers (on– and off road–driver training ranges) at Army locations in CONUS and outside continental United States (OCONUS) as directed by the Director, Army Staff (DAS).

(9) Resource required POV and motorcycle safety training programs.

(10) Provide oversight for all radioactive contamination surveys conducted in support of base closure or installation restoration activities.

j. Director of Army Safety. The Director of Army Safety will—

(1) Provide staff supervision of the U.S. Army Combat Readiness Center (USACRC) and the Army Safety Office.

(2) Establish, coordinate, and disseminate policy, guidance, and procedures for the Army Safety Program based upon corporate policy developed by ASA(I&E), statutory requirements, and national standards, in support of the Army's mission.

(3) Advise the Army Staff, the Chief of Staff, the Secretariat, and the SA on matters relating to the Army Safety Program and its implementation and effectiveness.

(4) Implement policies and develop procedures for implementing the Act of 29 December 1970, PL 91–596 (OSHAct).

(5) Execute an effective and efficient Army Safety Program in accordance with this regulation and statutory requirements, which provides safe and healthful work environments, missions, operations, and reduces accidents.

(6) Promote the use of CRM during all phases of Army planning.

(7) Monitor and measure Army Safety Program effectiveness through triennial auditing and management evaluation visits of ACOMs, ASCCs, DRUs, NGB, field operating agencies (FOAs), and their subordinate organizations.

(8) Provide direction and tasking to the Director, U.S. Army Technical Center for Explosives Safety (USATCES), on explosives and chemical agent safety matters.

(9) Advocate a program of specialized safety training courses for the Army.

(10) Establish procedures for accident reporting and recording Armywide.

(11) Determine which accidents will be investigated by the USACRC under the centralized accident investigation (CAI) criteria.

(12) Support appropriate funding to provide for an effective Army Safety Program.

(13) Review and submit Certificates of Risk Acceptance to the Chief of Staff or Secretariat with recommended appropriate courses of action for ammunition, explosives, biological agents, and chemical agents in accordance with DOD 6055.9, DA Pam 385–61 and DA Pam 385–64.

(14) Provide Army Staff oversight of the Army Radiation Safety Program; designate, in writing, a qualified health physicist to serve as the Army radiation safety officer (RSO) to manage the Army Radiation Safety Program in accordance with DOD, Army, Federal, and state regulations.

(15) Conduct reviews of general construction plans for explosives facilities, chemical agent facilities, and biosafety level–3 (BSL–3) containment and BSL–4 maximum containment facilities, and BSL–3 modular containment laboratories.

(16) Conduct pre–operation surveys of selected chemical agent and biological operations and all BSL–4 facilities.

(17) Monitor compliance with conditions of Nuclear Regulatory Commission licenses, Army radiation authorizations (ARAs), and U.S. Army Materiel Command (AMC) held radioactive commodity licenses.

(18) Coordinate with The Surgeon General (TSG) and the U.S. Army Medical Department (AMEDD) functional proponent for preventive medicine on the Army Occupational Health Program and on occupational safety issues including medical aspects of safety policy regarding hazard communication and hazardous materials (HAZMAT) program requirements.

(19) Exchange accidental injury data with TSG for an accurate assessment of the Army health status.

k. The Surgeon General. The Surgeon General will—

(1) Coordinate with Office of the Director of Army Safety (ODASAF) on occupational safety and health issues including medical aspects of safety policy regarding hazard communication and HAZMAT program requirements.

(2) Establish policies and procedures for implementing occupational health aspects of the Act of 29 December 1970, PL 91–596 (OSHAct).

(3) Provide occupational health support to the ODASAF for conduct of annual management reviews.

(4) Collect and analyze accident and injury data for an accurate assessment of the Army health status and collaborate with other DOD organizations to reduce accidents and injuries.

(5) Provide support to commanders in developing and implementing installation ergonomics programs.

(6) Advance partnership initiatives that prevent workplace injuries and illnesses.

(7) Formulate, develop, and disseminate medical policy and guidance for the Army Occupational Health Program, Army Health Hazard Assessment Program, and related issues such as ergonomics.

(8) Develop policies, criteria and standards, and procedures for the prevention or control of exposures to occupational health hazards in military–unique work environments.

(9) Provide guidance and policy on health and safety procedures and protocols for human use testing.

(10) Provide advice and guidance for health hazard assessments and medical surveillance during research, development, testing, and fielding of systems and equipment.

(11) Provide technical guidance to Army Headquarters in the evaluation and management of occupational health risks from actual or potential exposures to workplace hazards.

(12) Ensure that occupational health procedures and controls are implemented during the development and fielding of medical materiel and systems.

(13) Establish policy and guidance for the selection of protective clothing and equipment for use in chemical operations.

(14) Provide medical guidance for selecting appropriate protective equipment for use in the biological program.

(15) Review all radiation dose limits in excess of limits promulgated in this regulation and provide these increased limits to the Army RSO for promulgation as necessary.

(16) Establish and promulgate Army radiological health guidelines for deployment operations.

(17) Provide medical support for the Army's activities in Joint chemical, biological, and nuclear surety programs as well as for the Army's Chemical Agent Safety Program and the Army's Biological Safety Program.

l. The Army Test and Evaluation Management Agency. The Army Test and Evaluation Management Agency will—

(1) Ensure that Army policy on weapon system test and evaluation in support of acquisition adheres to environmental regulations, policy, range safety, and occupational health standards, and promotes sustainable ranges in coordination with ASA(ALT).

(2) Serve as the proponent for policies addressing test range clearance and managing range residue.

m. Commanders and directors of Army Commands, Army Service Component Commands, Direct Reporting Units, field operating agencies, and Chief, National Guard Bureau. Commanders and directors of ACOMs, ASCCs, DRUs, field operating agencies, and Chief, NGB will—

(1) Establish, emphasize, resource, evaluate, and ensure a vital, organization–wide safety program.

(2) Designate a qualified safety professional as the command safety director.

(3) Ensure that the command safety director has direct reporting responsibility to the commander and designation as a member of the special staff.

(4) Appoint and rate the aviation safety officers (ASOs) at regiment/brigade/group level and below.

(a) Units that do not have table of organization and equipment (TOE)/table of distribution and allowance (TDA) authorized ASO positions will use the expertise of the next higher authorized ASO in the chain of command. Additionally, commanders not authorized full–time safety personnel by the TOE/TDA will appoint an additional duty safety officer (ADSO).

(b) Commanders will support the resourcing of adequate computer equipment to allow ASOs to perform assigned duties more efficiently.

(5) Designate a radiation safety staff officer when necessary to support subordinate organizations and ensure compliance with prescribed radiation safety programs.

(6) Develop training required by this regulation in accordance with AR 350–1.

(7) Implement the program elements of this regulation, CRM, and share best practices as applicable.

(8) Resource brigade combat team safety professionals to advise the commander on safety and occupational health and integrate CRM at the brigade level.

(9) Administer a safety program consisting of the specific safety program elements listed in table 1–1 as core requirements, and those listed as mission dictated, as required.

(10) Fulfill the requirements listed in paragraph 1–6 of this regulation as applicable for installations not managed by U.S. Army Installation Management Command (IMCOM).

Table 1–1
Army Safety Program functions

Chapter		
	Part 1 Army Safety Program Management Functions	
1	Required	Introduction: General Safety Requirements
2	Required	Strategic Planning, Army Safety Program Structure, Safety Program Evaluation, Councils, and Committees
3	Required	Accident Investigation and Reporting
4	Required	Contracting Safety
5	Mission Dictated	Explosives Safety Management
6	Required	Public, Family, Off–Duty Recreation and Seasonal Safety
7	Mission Dictated	Radiation Safety Management
8	Required	Safety Awards Program
9	Mission Dictated	System Safety Management
10	Required	Training Requirements
11	Required	Motor Vehicle Accident Prevention
	Part 2 Supporting the Force	
12	Mission Dictated	Force Mobilization
13	Mission Dictated	Tactical Safety
14	Required	Safe Cargo Operations
15	Mission Dictated	Aviation Safety Management
	Part 3 Supporting the garrison and industrial base	
16	Required	Occupational Safety and Health Program (Workplace Safety)
17	Required	Workplace Inspection
18	Required	Industrial Operational Safety

Table 1–1
Army Safety Program functions—Continued

19	Required	Emergency Planning and Response
20	Mission Dictated	Biological Defense Safety
21	Mission Dictated	Chemical Agent Safety Management
22	Mission Dictated	Marine Activities
23	Mission Dictated	Medical Safety
24	Required	Facility Reuse and Closure

(11) Ensure all systems are used according to safety and health guidance published in technical, field, and training manuals; Ground Safety Notification System (GSNS); safety of flight; bulletins; circulars; and Army and Federal regulations.

(12) Employ the U.S. Army Corps of Engineers (USACE) as program manager (PM)/director for the planning, design, and construction of military construction facilities.

(13) Approve the use of non–standard ammunition within their commands.

(14) Ensure written procedures are established to implement the accident investigation program within their commands. As a minimum, these procedures will specify—

(a) Initial accident notification procedures.

(b) Accident site security responsibilities.

(c) Installation–level safety office responsibilities.

(d) Format and content of orders appointing investigation boards.

(e) Authority of board presidents for determining the scope, equipment, technical assistance, and other support necessary to accomplish investigations.

(f) Those installation–level organizations required to support investigations and the type of support required.

(g) Provisions for command review and briefings.

(h) Internal procedures necessary to safeguard the privileged nature of accident reports maintained under their control.

(i) Procedures for establishing and maintaining an accident recommendation tracking system for recommendations within their assigned area of responsibility.

(15) Ensure subordinate organizations develop, coordinate, and exercise aviation and ground emergency plans (see DA Pam 385–10 and DA Pam 385–40).

(16) Ensure commander/director will appoint additional duty safety personnel to perform required safety and accident prevention functions at troop/industrial/administrative units. This includes company–level or equivalent organizational component.

n. Commanding General, U.S. Army Materiel Command. The CG, AMC will—

(1) Minimize hazards for materiel and systems acquired for the Army and other military services.

(2) Identify potential corrective actions for each hazard and project the total life cycle accident costs for each potential corrective measure.

(3) Implement the health hazard assessment requirements of AR 40–10.

(4) Develop airworthiness qualification of Army aircraft systems in accordance with AR 70–62.

(5) Recommend to the ODASAF whether specific chemical agents or weapons systems are safe for storage, shipment and deployment, and what safety controls are required.

(6) Provide oversight of contractor activities to ensure the safety of chemical agents during RDT&E sponsored by AMC.

(7) Analyze chemical agent event data and recommend remedial actions to ODASAF.

(8) Collect, analyze, and disseminate chemical agent safety information to HQDA and activities with a chemical agent mission.

(9) Provide final safety review for ammunition peculiar equipment.

(10) Develop and transmit safety–of–use messages for commodities in accordance with AR 750–6 and a vehicle–safety recall campaign.

(11) Develop and maintain explosives safety standards for AMC industrial operations and the ammunition production base.

(12) Develop and acquire new conventional and nonconventional munitions providing for user and public safety during the manufacture, packaging, transportation, storage, use, and disposal/demilitarization.

(13) Report and investigate malfunctions involving ammunition and explosives (AR 75–1).

(14) Ensure proper testing is done on ammunition and explosives in accordance with 49 CFR 173 and technical bulletin (TB) 700–2.

(15) Provide final engineering review of specialized equipment used in chemical operations for compliance with DA chemical agent standards (for example, lifting devices/slings; agent containers providing vapor containment for operation, transportation, or storage; and nonstandard or locally fabricated equipment).

(16) Identify, establish, and maintain safety–training programs to support the chemical agent surety program.

(17) Exercise administrative control over Nuclear Regulatory Commission licenses and ARAs for Army radioactive commodities within AMC's purview of this regulation.

(18) Provide ionizing radiation dosimetry services at the Army Dosimetry Center (ADC) that meet the requirements of 10 CFR 20.1501(c), paragraph 7–2*f* of this regulation, and DA Pam 385–24.

(19) Provide Army low–level radioactive waste disposal services in accordance with DA Pam 385–24.

(20) Provide the Army radiation test, measurement, and diagnostic equipment (TMDE) program material and accredited radiation–instrument calibration services (AR 750–43 and TB 750–25).

(21) Maintain the capability to provide onsite radiation safety support following radioactive material contamination accidents and incidents in accordance with DA Pam 385–24.

(22) Ensure that foreign military sales of radioactive material, items that contain radioactive material, x–ray machines, and military–exempt lasers comply with applicable U.S. regulations and DOD directives.

(23) Establish a Fuze Safety Board to ensure that fuzing systems provide an optimum degree of safety.

(24) Establish an Ignition System Safety Board to ensure that rocket motor ignition systems provide an optimum degree of safety.

(25) Establish an Army Weapon System Safety Review Board to ensure that Army weapon systems are safe and suitable during their full life cycle.

o. Commanding General, U.S. Army Forces Command. The CG, FORSCOM will—

(1) Coordinate activities across the Army to integrate CRM into programs to protect the force.

(2) Establish safety policy, standards, and guidance for use in exercises, maneuvers, and tactical operations.

(3) Provide EOD assets and emergency responders to installations and combatant commanders as required.

(4) Provide escort of off post chemical surety material and recovered chemical warfare material as requested or required.

p. Commanding General, U.S. Army Training and Doctrine Command. The CG, TRADOC will—

(1) Integrate safety and CRM training into the curricula of Army schools.

(2) Ensure the combat developer incorporates system–safety performance objectives into the concept formulation package.

(3) Incorporate safe operating practices and physical standards in field manuals, training circulars, and other documents.

(4) Direct and implement Army safety policy and programs for U.S. Army Reserve Officers' Training Corps (ROTC) units.

(5) Integrate safety procedures into all Army training guidelines and techniques to be applied in the field.

(6) Integrate safety considerations into new equipment training.

(7) Direct Combat Development Centers to identify hazards and requisite safety standards to be met in critical combat tasks as part of task analysis.

(8) Direct Combat Development Centers to incorporate critical safety parameters in the requirements documents for new systems acquisitions and ensure operational tests verify the product provides requisite protection.

(9) Provide the combat developer position on materiel solutions.

(10) Serve as risk management integration proponent for doctrine, training, and combat development.

(11) Coordinate risk management integration activities across the Army and at Joint–level into programs to develop the force to include doctrine development, requirements definition, common applications, training support, and risk management education in the Army, including Army Forces (ARFOR) component in the Joint–level functions.

(12) Ensure chemical agent safety training and instruction is consistent with this regulation and monitor operation of the chemical defense training facility to ensure compliance with this regulation and DA Pam 385–61.

(13) Ensure tactical chemical agent safety training and instruction is consistent with this regulation and DA Pam 385–61, chapter 12.

(14) Develop and include appropriate radiation safety training in military occupational specialty (MOS)/specialty skill identifier producing courses and in–unit mission–essential task list profiles for personnel in MOS/specialty skill identifiers and TOE units that use radiation and radioactive commodities, depleted uranium munitions, and depleted uranium armor.

(15) Prepare training modules (in coordination with the CG, AMC and the CG, Army Medical Department Center and School (AMEDDC&S), about protection from United States and foreign ionizing and non–ionizing radiation sources that may expose Army personnel to radiation during deployment.

(16) Provide radiation safety courses to qualify unit and garrison RSO's in accordance with Nuclear Regulatory Commission applicable licenses.

q. Commanding General, U.S. Army Corps of Engineers. The CG, USACE will—

(1) Promulgate the safety standards to be used in Army construction and USACE Civil Works facilities and activities (EM 385–1–1).

(2) Ensure that Army standard designs and USACE administered facility/utility designs and construction conform to statutory and regulatory fire, safety, occupant health, and explosives standards, and otherwise provide a safe and healthful workplace for user personnel and materiel.

(3) Assist Army activities in the planning and execution of unexploded ordnance clearance and response operations.

(4) Serve as the Army executive agent for chemical agent clean up operations at FUDS and provide assistance to active Army installations conducting chemical agent clean up operations.

(5) Advise and assist the DCS, G–3/5/7 in determining range, training land, and support facility requirements during development of new weapon systems.

(6) Provide FASS policy, direction, and oversight to Army elements in accordance with paragraph 1–4*b*(15) and chapter 9 of this regulation.

(7) Serve as supporting agency to the coordinating agency (Occupational Safety and Health Administration (OSHA)) under the National Response Plan Safety and Occupational Health Annex.

(8) Provide safety at civil works facilities for the recreating and/or visiting public.

(9) Serve as the proponent for FAR 52.236–13 and its Alternate 1 for use in DOD construction, renovation, and demolition contracts.

r. Commanding General, U.S. Army Medical Command. The CG, MEDCOM will—

(1) Assist HQDA, in monitoring biological safety activities throughout the Army identifying concerns, trends, and required corrective actions.

(2) Provide oversight of chemical agent RDT&E evaluation conducted by contractors.

(3) Provide safety and health oversight of research, development, testing and evaluation activities, including contractors, in support of the Active Army of Joint chemical defense programs sponsored by MEDCOM.

(4) Implement medical policies and provide health–related chemical agent training to patient care providers and industrial hygienists.

(5) Provide or designate physicians, industrial hygienists, and other preventive medicine personnel to support chemical and biological inspection teams.

(6) Implement medical policies concerning military chemical agent support.

(7) Develop medical policies in support of the Active Army of Joint chemical, biological, radiation, and nuclear defense activities.

(8) Provide onsite medical advice and support following radioactive contamination accidents or incidents in accordance with AR 40–13 and DA Pam 50–5.

(9) Provide, on a cost–reimbursable basis, radiation safety program assessment services to support triennial surveys of each installation/garrison, each Nuclear Regulatory Commission license, Army reactor permit, or ARA holder for compliance with applicable radiation safety and health regulations and guidance.

(10) Establish and maintain an archive for correspondence relating to Nuclear Regulatory Commission licenses and ARAs.

(11) Establish occupational health surveillance program for personnel occupationally exposed to radiation in accordance with AR 40–5 and DA Pam 40–11.

(12) Perform Health Hazards Assessments of commodities and systems in accordance with AR 40–10 as early as practical in their development and before fielding. Perform special occupational health studies (for example radiation studies and toxicity evaluations) in support of Health Hazard Assessments on a cost–reimbursable basis.

(13) Provide on a cost–reimbursable basis, radiation bioassay services (AR 40–5) that comply with criteria of the American National Standards Institute (ANSI) (see ANSI Safety Code N13.30).

(14) Ensure the development of doctrine, implementation plans, procedures, capabilities, and training relative to occupational and environmental health surveillance to address exposures to Soldiers and Army civilian employees throughout their time in service.

(15) Establish chemical, biological, radiological, and nuclear advisory medical teams at appropriate locations.

(16) Provide periodic evaluation of installation occupational health programs along with a plan to ensure appropriate follow–up and resolution of corrective actions. A copy of the evaluation along with the plan for resolution should be provided to the installation commander.

(17) Provide subject matter expertise to commanders and their staffs for the assessment, management, and control of occupational and environmental health risks during the CRM process.

s. Commanding General, Military Surface Deployment and Distribution Command. The CG, SDDC will—

(1) Develop and implement DOD and DA intramodal transportation safety policies.

(2) Review, develop, and implement DA commercial stevedore contracts to ensure they comply with safety and health statutory and regulatory guidance, including this regulation.

(3) Develop policy for HQDA approval for safety in operations requiring DOD compliance with DOT HAZMAT regulations.

(4) Develop policy for exemption requests by DOD components for shipments of HAZMAT by DOT shippers that do not comply with DOT regulations.

(5) Provide traffic–engineering support to Army activities.

(6) Develop safety policy for maritime operations requiring compliance with the International Maritime Dangerous Goods Code when loading vessels at SDDC terminals.

(7) Obtain waivers when appropriate from DOT HAZMAT regulations.

(8) Develop a memorandum of understanding between the DOD and the Chemical Transportation Emergency Center and the National Response Center for the mutual exchange of information on transportation accidents involving DOD munitions and explosives.

(9) Provide input to the DOT Emergency Response Guide.

(10) Establish commercial carrier and driver qualifications and supplementary training requirements, in cooperation with the DOT, for the transportation of DOD munitions and explosives. Drivers will carry proof of required training or experience.

(11) Coordinate with the Association of State Police, Highway Patrol, Commercial Vehicle Safety Alliance, or other similar organizations, to ensure accident prevention and emergency response cooperation.

t. Commander, U.S. Army Special Operations Command. The Commander, USASOC will—

(1) Provide services to Army Special Operations Forces (ARSOF) worldwide.

(2) Investigate or provide technical advisors to other commands as required to investigate accidents involving safety of flight unique tactics, techniques, and procedures.

(3) Provide ARSOF close quarter battle/advanced military operations in urban terrain and Army special operations aviation range safety policy.

(4) Develop policy, procedures, and standards, to include requirements, for conducting ARSOF training and operations.

u. Commander, Army Test and Evaluation Command. The Commander, ATEC will—

(1) Review safety documentation and issue Safety Releases for training, testing, and demonstrations when Soldiers are involved; and Safety Confirmations in support of major milestone decisions, materiel release decisions, and fielding decisions in support of material release.

(2) Verify safety and health acceptability of systems, primarily by test and evaluation (see AR 73–1).

(3) Ensure that System Evaluation Plans, test directives, and test design plans for all development tests and operational tests (OTs) require the collection and recording of data from which an independent assessment of hazards can be made and that the results are documented in all test reports, safety confirmation, and system evaluation reports.

(4) Ensure the U.S. Army Developmental Test Command (DTC) provides a safety documentation for equipment deployment and operation in "host" countries when required.

(5) Verify the effectiveness of safety requirements, design changes, or procedural controls that have been incorporated to reduce the risk associated with previously identified hazards.

(6) Provide the Program/Product/Project Manager notification of the risk assessment code (RAC) assigned to Test Incident Reports and identified potential health and safety hazards in the test report.

(7) Ensure DTC provides AMC and the materiel developer applicable documentation to support preparation of the Nuclear Regulatory Command license for materiel being fielded, which contains radioactive sources.

v. Commander, U.S. Army Combat Readiness Center. The Commander, USACRC will—

(1) Conduct centralized investigations of selected Army accidents and hazardous conditions and present the results to Army leadership.

(2) Coordinate on selected combat loss investigations.

(3) Serve as the focal point for instigating the necessary cultural changes and developing the processes, structure, and training necessary to implement CRM Armywide.

(4) Provide support in developing policy and doctrine for loss prevention through CRM.

(5) Develop, coordinate and facilitate a single entry, multiple use automated reporting system for processing loss reports for use in CRM decisions and to aid in developing loss prevention programs.

(6) Analyze and promptly disseminate situation reports to the Army leadership.

(7) Analyze loss cause factors, systemic origins, and trends; develop exportable procedures, criteria, and techniques for use of Army Safety Management Information System (ASMIS) and other databases for use in accident analysis by ACOMs, ASCCs, DRUs, ARNG, installations, and HQDA agencies.

(8) Interact with other military Services, Federal, state, and local agencies and industry to identify and publish best practices and loss prevention strategies.

(9) Develop and disseminate Armywide countermeasures against Army losses.

(10) Conduct a program of safety research and analysis to identify problem areas, causal factors, and system defects; recommend countermeasures.

(11) Develop and manage an Armywide multimedia loss–prevention communications program.

(12) Assist the functional Chief of the Army Safety Management Career Program in administering the program and providing centralized training of DA safety interns.

(13) Administer a program to provide safety training and education that meets the Army's needs.

(14) Assist the ODASAF in developing system safety policies, objectives, and evaluation standards.

(15) Provide technical assistance to ASA (AL&T) and Chief Information Officer/G–6 to determine the accuracy and completeness of system safety risk assessments (SSRAs) being considered for Army acquisition executive–level decisions on acceptance of risk.

(16) Provide an independent safety assessment of Army Systems Acquisition Review Council systems to the Army Systems Acquisition Review Council Secretary (ASA (AL&T)); provide a copy to the DCS, G–1 (MANPRINT Directorate), and the materiel developer.

(17) Develop and disseminate improved system safety engineering techniques.

(18) Provide system safety lessons learned for MANPRINT analyses.

(19) Provide access to system safety lessons learned.

(20) Establish DA guidance for PMs and equivalent managing activities regarding requirements to track all hazards and provide for timely communication of information on system–wide risks and controls among operators, trainers and materiel developers.

(21) Establish, identify, and maintain a DA program of generic system safety research in support of Army development, facility and acquisition programs.

(22) Develop and maintain a DA–level Hazard Communication System to provide for the exchange of hazard information from accident data to all managing activities as well as hazard information from PMs across the Army.

(23) Establish and maintain the ASMIS and ensure that the ASMIS is responsive and accessible to ACOM, ASCC, DRU, NGB, installation, and HQDA requirements.

(24) Establish and develop Armywide procedures for development of loss prevention programs and assisting Army Headquarters in establishing loss prevention programs within their respective areas.

(25) Maintain the Army accident recommendation tracking system for DA and DOD–level actions.

(26) Collect, tabulate, and analyze all Army personnel and accident loss data.

(27) Disseminate information in accident prevention techniques.

(28) Distribute educational and safety promotional materials.

(29) Provide specific information on new activities and potential hazards.

w. Materiel developers, acquisition managers, equipment, process, and facility designers. Materiel developers, acquisition managers, equipment, process, and facility designers will—

(1) Initiate and tailor a System Safety Program in accordance with this regulation, DA Pam 385–16, and MIL–STD–882D for all Army materiel, systems, software, equipment, facilities, and processes (such as, but not limited to, in–house development, commercial off–the–shelf (COTS), non–developmental item (NDI), Government furnished equipment (GFE), and so forth) regardless of the acquisition process utilized (for example, evolutionary, spiral development, and so forth.

(2) Ensure the System Safety Program addresses materiel change, modifications, integration, fielding, deployment, disposal, and hazard tracking.

(3) Establish, fund, and provide adequate resources to implement and maintain an effective system safety effort covering development, production, fielding, deployment, demilitarization, and disposal for their programs, projects, equipment, processes, and developmental areas.

(4) Obtain the appropriate safety documentation (for example, safety assessment report) from the item or equipment developer or vendor when purchasing and developing equipment/facilities for the Army. Guidance in DA Pam 385–16 must be followed.

(5) Generate a composite risk assessment before allowing Soldiers or Army civilians to use, operate, maintain, and/or dispose of an item, equipment or facility being purchased or acquired for the Army or other military services. A safety release must be obtained from Headquarters, DTC or in accordance with guidance provided in DA Pam 386–16 whenever Soldiers are involved in the event.

(6) Certify that safety hazards are eliminated, controlled to lowest risk level, or the resulting residual risk is formally accepted for their materiel, systems, equipment, facilities, and processes developed, acquired, fielded, and provided to the Army and other military services.

(7) Ensure program executive officers and PMs serve as the safety officers with responsibility for the proper planning and execution of system safety requirements in this regulation and DODI 5000.2.

(8) Upon identification or report of a significant hazard in fielded systems, materiel, developed equipment, and facilities, initiate risk assessment, funding, and corrective action immediately.

(9) Identify any radioactive material or machines producing radiation and ensure Nuclear Regulatory Commission license or ARA is obtained.

(10) Obtain a radiation study for all materiel being fielded, that contains a radioactive source or emits radiation.

(11) Ensure applicable Army, DOD, Federal, and state regulations and industry standards are met during design of facilities for the use of radioactive material or machines producing radiation.

x. Program Executive Office, Ammunition. The PEO, Ammo will—

(1) Evaluate non–standard ammunition requested for use from ACOMs, ASCCs, DRUs, or NGB based on existing information from other Services, North Atlantic Treaty Organization, Federal or state agencies, or upon the results of independent testing.

(2) Authorize non–standard ammunition and explosives for Army use. Authorization will include SSRA, health hazard assessment, and surface danger zones.

y. The Inspector General. The Inspector General (TIG) will—

(1) Evaluate the safety programs of Army organizations with nuclear, chemical and biological surety missions according to this regulation.

(2) Conduct other special inspections involving Army safety when directed to do so in accordance with AR 20–1.

(3) Evaluate medical support functions related to the nuclear, chemical and biological surety programs according to this regulation, AR 40–5, DA Pam 40–173, DA Pam 40–8, and policy and standards published by Office of The Surgeon General.

z. U.S. Army Technical Center for Explosives Safety. The USATCES will—

(1) Assign hazard classification to explosives and ammunition and ensure proper coordination with DOD and the military services.

(2) Provide final Army review and approval of explosives and chemical agent safety sites and construction plans being submitted for approval on behalf of the ODASAF to the Department of Defense Explosives Safety Board (DDESB).

(3) In coordination with the ODASAF, continually assess and identify explosives and chemical agent safety training requirements for the Army and for other services in accordance with the Single Manager for Conventional Ammunition charter.

(4) Provide explosives and chemical agent safety training to support Army safety career program requirements, with the exception of the Chemical Demilitarization Program, through the Defense Ammunition Center.

(5) Provide technical assistance and track explosives and chemical agent safety waivers, exemptions, Certificates of Risk Acceptance and Certificates of Compelling Reasons.

(6) Provide technical support to the Army Staff for budgetary planning on matters affecting explosives safety.

(7) Provide explosives safety and chemical agent safety technical information and assistance to HQDA, ACOMs, ASCCs, DRUs, FOAs, and installations in support of Armywide operations.

(8) Establish and maintain an explosives safety technical database and a comprehensive explosives safety technical library.

(9) Maintain and execute the U.S. Army Explosives Safety Test Management Program to validate, establish, or modify explosives safety requirements promoting research, development, promulgation, and application of explosives safety technology.

(10) Provide explosives and chemical agent accident investigation assistance, analyzing explosives and chemical agent accident data, and tracking remedial actions to develop and recommend corrective measures to the ODASAF.

(11) Track DDESB surveys to assist and support the ACOMs, ASCCs, DRUs, or NGB in accomplishing corrective measures required to comply with DA and DOD ammunition, explosives and chemical agent safety standards.

(12) Review, approve, and support explosive safety submissions and explosives safety quantity–distance site plans for munitions response development.

(13) Perform initial and periodic validation of explosives manufacturing and load, assembly, and pack processes. Provide copies of validations to ODASAF.

(14) Conduct explosives safety assistance visits of ammunition activities as requested by HQDA or the ACOMs, ASCCs, DRUs, or NGB. Reports will be provided directly to the commander involved, and will contain observations, comments, and recommendations for improvements or changes to specific ammunition operations or processes to enhance safety.

(15) Provide technical support to the DA Explosives Safety Council and the DA Chemical Agent Safety Council.

aa. U.S. Army Chemical Materials Agency The CMA will—

(1) Establish and maintain a written quality assurance (QA) program consistent with the requirements of the International Standards Organization per DOD guidance.

(2) Ensure that all CMA and cleanup facilities and operations, whether operated by or performed by Government or contractors, comply with the following:

(a) Specific requirements imposed by DOD, the Army, and other Federal and state agencies as specified in the contract.

(b) All Federal statutes.

(3) Provide centralized management and direction to the DOD for treatment and disposal of recovered chemical warfare materiel (RCWM) in a safe, environmentally sound, and cost–effective manner.

(4) Prepare transportation, interim holding facilities, treatment plans, and coordination of plans pertaining to RCWM.

(5) Obtain the concurrence of the U.S. Department of Health and Human Services (HHS) on transportation and treatment plans.

(6) Maintain a database of those locations where chemical warfare material was (or was suspected to have been) manufactured, tested, stored, deployed, or disposed of.

(7) Provide public information and encourage public involvement prior to and during the treatment of RCWM in accordance with chapter 24 and DA Pam 385–24.

(8) Provide chemical agent medical support training (that is, community medical personnel) to support RCWM response activities.

(9) Conduct pre–operational surveys and operational readiness reviews prior to the test and operation of new facilities or equipment, in support of major changes, and when changing campaigns (for example, reconfiguring equipment and facilities to process different munitions or agent). These reviews, conducted with the assistance of oversight agencies (for example, USDHHS, AMC, U.S. Army Material Systems Analysis Activity, and so forth), document the status of the equipment and facility prior to the decision to operate. The operational surveys/reviews take the place of most check and hold points associated with traditional Army item development (for example, safety assessment reports, safety releases, independent safety assessments, type classification, and so forth).

(10) Design, approve, and operate equipment and facilities in support of assigned CMA missions to include storage, maintenance, production and disposal of stockpile and nonstockpile chemical agent and munitions.

ab. Edgewood Chemical Biological Center. The Edgewood Chemical Biological Center will—

(1) Establish and manage a QA program for all chemical agent storage and use sites except those of CMA.

(2) Provide quality systems certification for organizations, except those of CMA, that conduct agent monitoring activities for personnel and environmental protection.

(3) Provide centralized management and direction to the DOD for treatment and disposal of RCWM in a safe, environmentally sound, and cost–effective manner.

ac. Contracting officials. Contracting officials will—

(1) Review contracts to ensure proper clauses are in place to meet Army, DOD, applicable local, state, and Federal regulations regarding safety and occupational health in accordance with applicable DA Pams.

(2) Prepare written procedures for reviewing contractor capability to comply with and administer the safety and occupational health aspects of the contract requirements.

(3) Ensure that periodic inspections are conducted by a qualified safety professional at contractor worksites to ensure compliance with this regulation, in accordance with the contract.

ad. The Provost Marshall General. The PMG will—

(1) Provide staff supervision over programs for motor vehicle traffic supervision to ensure each installation properly integrate a traffic supervision program, traffic safety enforcement, and installation efforts to cooperate with traffic support programs at the state, regional and national level.

(2) Maintain liaison with appropriate staff agencies, other military departments, safety personnel, and external agencies on traffic safety and accident reporting systems.

(3) Maintain liaison with the DOT and other Federal departments and agencies on the National Highway Safety Program Standards and programs that apply to military traffic supervision.

(4) Participate in the national effort to reduce intoxicated driving and alcohol safety action projects in neighboring communities.

ae. Army Service Component Commands. Army Service Component Commands operating outside the United States will—

(1) Address the applicability of host nation (HN) safety and occupational health standards to Army operations in regulations and policies.

(2) Establish the theater–unique policy and procedures for safety and occupational health requirements to address theater–unique hazards and to ensure compliance with applicable Status of Forces Agreements (SOFAs), supplements and undersigned protocols thereto.

(3) Advocate establishment of safety and occupational health requirements in SOFAs that are common for United States and HN personnel.

(4) Comply with Army safety standards applicable to operations and missions within the United States and its territories unless compliance is impracticable or would violate applicable SOFAs, supplements, and undersigned protocols thereto.

af. Deploying units. Deploying units will—

(1) Comply with ASCCs' safety requirements when deployed into area of responsibility.

(2) Ensure subordinate commanders, managers, and supervisors are informed regarding their ASCC's safety and occupational health requirements and applicable HN safety requirements.

(3) Follow the safety rules and regulations established by the Service component command and the combatant command unique rules and regulations, as appropriate.

1–5. General Army Safety Program responsibilities

a. Soldiers and Army civilians at all levels. Soldiers and Army civilians at all levels will—

(1) Stop unsafe acts detrimental to Army operations.

(2) Be responsible for accident prevention through the application of the mishap risk management component of CRM.

(3) Comply with this regulation, the Occupational Safety and Health Act of 1970 (OSHAct), safety regulations, the Army Occupational Health Program, work practices, and standing operating procedures (SOPs).

(4) Use all personal protective equipment (PPE) and protective clothing provided, including seatbelts, in accordance with training, hazard analyses, work instructions, and as required by the task at hand.

(5) Report Army accidents, near misses, and hazards in their workplace as soon as possible to their supervisor or leader.

(6) Employ CRM in managing risk.

b. Supervisory and operating personnel who direct or affect the actions of others. Supervisory and operating personnel who direct or affect the actions of others will—

(1) Maintain a safe and healthful workplace.

(2) Inspect the work area for hazards.

(3) Promptly evaluate and take action as required to correct hazards.

(4) Be responsible for use of CRM during planning, preparation, and execution of all operations.

(5) Be responsible for accident prevention to the same extent that they are responsible for production, service, and mission accomplishment.

(6) Be held accountable for accidents and property damage, occurring in operations under their direct supervision and control.

(7) Ensure that Soldiers and Army civilians are trained and competent to perform their work safely, efficiently, and effectively.

(8) Counsel and take action as necessary with Soldiers or Army civilians who fail to follow safety standards, rules and regulations, including the use of personal protective clothing and equipment, and seatbelts as set forth in the OSHAct; Federal, DOD and Army regulations and Army pamphlets.

(9) Conduct safety meetings (such as safety awareness, training, and procedures review) with the Soldiers and Army civilians they supervise.

(10) Protect Soldiers and Army civilians who identify hazards, raise safety and health concerns, or engage in authorized safety and occupational health activities against reprisal.

(11) Initiate the necessary actions to facilitate accident notification, investigation, and reporting as soon as they become aware of the occurrence of an accident.

(12) Establish accountability for safety and occupational health through the performance evaluation system and performance counseling sessions.

(13) Consult with their servicing civilian personnel office or legal office prior to implementing any rules, policies, procedures, or SOPs that could change the conditions of employment of Army civilian employees.

c. Army leaders at all levels. Army leaders at all levels will—

(1) Provide leadership to their activity/units' safety and occupational health program and accident reduction initiatives.

(2) Protect personnel, equipment, and facilities under their commands.

(3) Periodically review their activity/units' safety and occupational health program and accident reduction initiatives.

(4) Provide adequate resources for an effective safety and occupational health program, compliant with Army policy and program requirements.

(5) Establish accountability for safety and occupational health through the performance evaluation system and performance counseling sessions.

(6) Implement safety and occupational health policies.

(7) Integrate CRM into their mission activities.

(8) Execute system safety responsibilities as defined in this regulation when purchasing materiel, software, or equipment for all Army operations.

(9) Coordinate modifications of all Army systems, including software, with all appropriate program executive officers or program/product/project managers.

(10) Prohibit visitors from operating any military vessel, aircraft or vehicle which causes or perceives to cause an increase in risk.

(11) Provide equipment improvement recommendations or quality deficiency reports for deficiencies, malfunctions, or failures that create unsafe conditions or hazards in accordance with DA Pam 738–751.

(12) Ensure range safety responsibilities and procedures are implemented in accordance with AR 385–63.

d. Safety director (officer) and safety staff. The safety director (officer) and safety staff will—

(1) Serve as principal advisor to the commander in all safety and occupational health related matters of mission execution pertaining to this regulation, safety and occupational health regulatory and statutory requirements.

(2) Execute the commander's safety and occupational health program.

(3) Communicate best practices and share lessons learned.

1–6. Policy

The following principles will be effectively integrated into all Army plans, programs, decision processes, operations, and activities:

a. Implement the standards promulgated by the OSHAct of 1970 as implemented in EO 12196; 29 CFR 1960; DODI 6055.1; DODI 6055.4; and DODI 6055.7 to provide a safe and healthful environment. The Army shall comply with the requirements in all nonmilitary DOD operations and workplaces, regardless of whether work is performed by military or Army civilian personnel. Apply the more protective or stringent standard where a conflict exists between the standards.

b. Instill in Soldiers and Army civilian employees the need to prevent human errors and omissions affecting safety, readiness, and mission success through application of the principles of CRM.

c. Encourage employees to report workplace hazards and to ensure that no employee is subject to restraint, interference, coercion, discrimination, or reprisal for exercising his/her rights to report unsafe or unhealthful conditions.

d. Achieve a high degree of safety and mission effectiveness through systematic management of inherent mission risks. Employ the CRM process to identify and manage risks to personnel, missions, operations, training, procedures, equipment, and the environment to avoid loss of life, personal injury or illness, property loss or damage, or environmental harm in the course of duty during peacetime, wartime, and contingency operations.

(1) Ensure that safety is a principal element in all operations and apply CRM procedures in each phase of the training management cycle to identify hazardous conditions and correct shortcomings responsible for these conditions.

(2) Integrate CRM procedures into all Army decisionmaking processes.

(3) Integrate the requirement for protecting the force with the demand for realistic training and mission readiness.

e. Ensure the safety and health of Soldiers, Army civilian employees, and the general public is a primary concern in the acquisition, use and disposal of equipment, facilities and materials.

f. Apply the system safety and CRM process during acquisition of materials, equipment, facilities, and systems to identify and manage hazards during the complete life cycle and employ engineering principles to the utmost extent possible to eliminate risks and control residual risks.

g. Take appropriate action to expeditiously correct discrepancies with statutory requirements.

h. Ensure that the Army Risk Reduction Program and Army Safety Program operate as mutually reinforcing programs.

i. Safety board members may not serve as collateral/legal board members to the same accident. Officers or enlisted members currently performing safety duties may not serve as collateral members.

j. Organizations will develop, coordinate, and exercise aviation and ground pre–accident or pre–emergency plans (see DA Pam 385–10, DA Pam 385–1, and DA Pam 385–40).

1–7. Safety advancement

The requirements contained in this regulation represent the minimum safety requirements. Therefore, safety professionals, Soldiers, Army civilians, and Army leadership at all levels are encouraged to constantly advance safety practices and CRM through the application of new technology, innovative best practices, and improved risk management tools.

1–8. Supporting Department of the Army pamphlets

To support the Army Safety Program and execution of this regulation, two types of DA pamphlets have been developed in accordance with DA Pam 25–40. They are the standard DA pamphlet and the informational DA pamphlet.

a. The standard DA pamphlets contain the mandatory information needed to carry out the policies and procedures prescribed by this Army regulation to execute specific areas of the Army Safety Program, for example, explosives safety, chemical agent safety.

b. The information pamphlets share "best practices." These collections of best practices from across the Army provide Soldiers and Army civilian employees with innovative models, examples, and tools to enrich their Army Safety

Program. Before publishing, each best practice is reviewed and approved by a group of subject matter experts. They are provided purely for information and are not required to execute the Army Safety Program or meet requirements of this regulation.

1–9. Conflict resolution

The Army shall comply with the standards promulgated by OSHA under Section 651, Title 29, United States Code (29 USC 651) or HN requirements in all non–military unique DOD operations and workplaces, regardless of whether work is performed by military, Army civilian or contract personnel. When an Army Headquarters commander determines that an OSHA standard should be modified for application to particular nonmilitary–unique working conditions, a proposed alternate standard will be developed and submitted to the Commander, USACRC, ATTN: CSSC–PR, Fort Rucker, AL 36362–5363 (with a copy sent to HQDA, ATTN: DACS–SF, Washington, DC 20310–0300) following guidelines established in 29 CFR 1960.17. The ODASAF will review the proposed standard and, if appropriate, forward it through the chain of command to the Secretary of Labor for approval. Upon approval of an alternate standard, the originating Army Headquarters may proceed with implementation. If adjudged to have Armywide applications, ODASAF will advise HQDA. National consensus standards may be used provided they are equal to or more stringent than Federal legal standards.

a. When requirements in this regulation conflict with a legal standard such as the OSHAct, or provide a lower degree of protection, the more stringent legal standard will apply. When requirements in this regulation are equal to or exceed such requirements in providing workplace safety, the Army requirements will apply.

b. At Joint–Service facilities and during Joint operations, when requirements in this regulation conflict with the workplace–safety standards of another Service's regulations, or provide a lower degree of protection, the other Service's regulations will apply. When requirements in this regulation are equal to or exceed the other Services' requirements in providing workplace safety, the Army requirements will apply.

1–10. Obligation for coordination and collaboration

Whenever possible, Army personnel will coordinate and collaborate with other services and Federal agencies to develop mutual standards, procedures, and processes.

1–11. Existing documentation and programs

Existing documentation (for example, written programs like hazard communication, system safety programs, SOPs, waivers, exemptions, hazard analysis, risk assessments, system safety program plans (SSPPs), and so forth) which met standards and regulations at their time of development need not be updated to meet the new requirements of this regulation until other reasons or conditions dictate revision.

Chapter 2
Strategic Planning, Army Safety Program Structure, Safety Program Evaluation, Councils, and Committees

Section I
Strategic Goals and Strategic Planning

2–1. Safety program planning

a. Each safety office will develop strategic goals, a strategic plan and a business plan to execute the strategic plan in accordance with DA Pam 385–10. Strategic planning will include planning for accidents and incidents. Plans will call for inclusion of Public Affairs operations.

b. Strategic planning will determine the organizational direction and metrics.

c. Planning within Army Safety Offices will focus on the organization's mission, vision, values, and goals. As a minimum, the strategic plan should encompass goals and objectives for 5 years, with a section that specifically addresses the focus of each year.

d. Strategic planning will be conducted at least annually in preparation for the coming fiscal year. Strategic planning should be conducted in time to identify the organizational goals to be achieved over the coming fiscal year, resources needed to achieve those goals, and funding required.

e. Progress in implementing the plan should be reviewed at least quarterly. The frequency of review depends on the activity level and changes that may affect the plan.

f. The strategic planning package will be provided to the organization's commander for review and approval.

2–2. Prioritization

All safety functions and tasks will be prioritized based on regulatory requirements and strategic planning in accordance with DA Pam 385–10.

a. All safety and tasks identified as not being met or completed will be evaluated to identify the potential risk to the organization.

b. The organization's commander will be provided the complete ranking of all safety functions and tasks along with the risk assessment for review and approval.

2–3. Strategic Management System

The Defense Readiness Reporting System is an integrated strategic management and measurement system developed by DCS, G–3/5/7 at the direction of the Chief of Staff of the Army (CSA). The system uses the Balanced Scorecard approach and the Army's overall scorecard is the "pinnacle" of the system. Each Army Safety Office will use the Balanced Scorecard approach in accordance with DA Pam 385–10 during their strategic planning sessions to ensure that goals and objectives are consistent with those established by the CSA.

Section II
Army Safety Program Structure

2–4. Introduction

The Army Safety Program is designed to provide the guidance and emphasis necessary to ensure that the Army operates in as safe and efficient an environment as is possible. This is achieved through the application of the mishap risk management component of CRM and the formal Occupational Safety and Health (OSH) programs directed at the individual Soldier and Army civilian. Therefore, it is important that safety organizations at all levels support the Army Safety Program. Each organization's goals and objectives are aligned to execute the Army Safety Program in the most effective manner possible.

2–5. Safety organization's functions

a. The safety organization will be structured and staffed to administer a safety program that is based upon the organization's mission, goals, and objectives and in accordance with the DODI 6055 series. The safety organization will—

(1) Execute tasks and functions addressing all aspects of safety and health— on the job; off the job; military and Army civilian operations; integration of mishap risk management component of CRM; chemical, biological and explosives safety; and other critical elements required to meet mission requirements and statutory compliance.

(2) Support efforts to develop military and Army civilian safety expertise through training, career development, and management procedures.

(3) Provide safety and related loss control services to all tenant and satellite commanders in support of their statutory and regulatory responsibilities. Develop local memorandum of understanding between host and tenant organizations to address necessary safety and occupational health responsibilities.

b. The medical components of the OSH programs are provided in AR 40–5.

c. The safety organization will execute the tasks and functions that address all aspects of safety: on the job; off the job; military and Army civilian operations; integration of mishap risk management component of CRM; and be consistent with other critical elements contained in table 1–1 as required to meet mission requirements.

d. Each safety organization will support efforts to develop military and Army civilian safety expertise through training programs, effective career development, and management procedures.

e. Installation commanders are responsible for safety of people, the environment, and the public on their installation. Formal agreements will be developed between host and tenant organizations to ensure necessary safety and occupational health responsibilities are addressed.

2–6. Safety office organizational structure

a. The safety office or organization will be structured and staffed to administer a OSH program through the chain of command based upon the organization's mission, goals, and objectives as well as statutory requirements.

b. Army safety offices and organizations will be established in accordance with the uniform criteria of this chapter and DA Pam 385–10 to ensure that each office or organization has trained and experienced personnel of sufficient grade and rank to accomplish the safety mission of each command, installation, organization or activity.

c. The safety office or organization will be funded and fully resourced to execute all responsibilities and functions designated in this regulation to assure safety program effectiveness.

d. Additional duty safety personnel will complete the Additional Duty Safety Course (ADSC) within 90 days of appointment as an ADSO.

2–7. Army safety and health program structure

a. The Deputy Assistant Secretary of the Army (Environmental Safety and Occupational Health) (DASA (ESOH)) is the Army Secretariat's proponent for safety and occupational health.

b. The Director of Army Safety is the advisor to the CSA on safety issues, supports the SA and CSA, on safety

issues, oversees execution of the Army Safety Program, synchronizes risk management integration efforts across the Army, and serves as the risk management advocate to the Army's senior leadership.

c. The Surgeon General is the advisor to the CSA on the occupational health aspects of the Act of 29 December 1970, PL 91–596 (OSHAct).

d. The Commander, USACRC is the focal point for developing the processes, structure, and training necessary to implement the Army Safety Program.

e. The designated safety professional/director will exercise staff supervision over an organization's safety program, mishap risk management component of CRM, and accident prevention activities. Duties performed by the safety director will include the full range of program management responsibilities. The safety director is a member of the commander's special staff and reports directly to the commander. The safety director will meet Office of Personnel Management (OPM) standards for the positions of Occupational Safety and Health, GS–0018/0803.

f. The safety staff/safety organization will be staffed with professional safety personnel meeting the requirements for these positions established by the OPM and the Army personnel office.

g. Safety organizations will be augmented by additional duty (military) or collateral duty (Army civilian) safety personnel to perform required safety and accident prevention functions in Army units, industrial, and administrative activities. Additional/collateral duty safety personnel will—

(1) Be appointed by commander on written orders.

(2) Be a commissioned officer, at battalion and higher unit levels.

(3) Be in the rank of staff sergeant or higher, at the company level.

(4) Have met or will meet the training requirements of chapter 11.

(5) Have 1 year or more retainability in the unit upon duty appointment.

(6) Give their safety duties proper priority.

(7) Report directly to their unit commander on safety–related matters.

(8) Coordinate activities with their installation or garrison safety office.

h. Army Civilian collateral safety personnel may be used to augment the safety organization. When used, they will—

(1) Be appointed in writing on orders.

(2) Have met or will meet the requirements of 29 CFR 1960.58— training of collateral duty safety and health personnel and committee members.

(3) Give their safety duties proper priority.

(4) Report directly to their unit commander/director on safety–related matters.

(5) Coordinate activities with their supporting safety office.

i. Additional/collateral duty personnel will be authorized use of official time for participating in safety and occupational health activities, including application of mishap risk management component of CRM, walkaround inspections, and other safety functions authorized by this regulation in support of their unit's mission.

j. Army Safety Offices will use a staffing model in accordance with DA Pam 385–10 to determine the optimum organization for achieving the mission. These models will be used to guide organizations and to aid in efforts to improve operations by analyzing how time is spent within an organization.

2–8. Safety and occupational health career field

a. The safety and occupational health career field is designated as CP–12. Included in this career field are: GS–0018, Safety and Occupational Health Specialists/Managers; GS–0690, Industrial Hygienists; GS–0640, Industrial Hygiene Technicians; GS–0803, Safety Engineers; GS–1306, Health Physicists; GS–1815, Air Safety Investigators; and GS–1825, Aviation Safety Inspector. The functional chief for career field CP–12 is the DASA (ESOH).

b. The Assistant for Safety to the DASA (ESOH) is the Career Program 12 functional chief representative and serves as the functional chief's principal advisor. Responsibilities of the functional chief representatives include—

(1) Establish CP12–unique requirements on recruitment, selection, promotion, training and development, and retention.

(2) Provide advice on career management.

(3) Identify the core competencies and supporting skills and knowledge that members of the career field must be able to perform and develop with the USACRC training and developmental requirements and opportunities to provide these competencies, skills, and knowledge.

(4) Establish programs to identify training and developmental needs, and provide resources to meet these needs.

(5) Establish and chair career planning and program boards.

(6) Request career program funding necessary to provide trained and qualified safety and occupational health professionals to meet the requirements of the Army.

c. Personnel assigned to perform the safety and occupational health (CP–12) functions will meet the requirements for these positions established by the OPM and the Army personnel office.

Section III
Safety Program Evaluation

2–9. Performance indicators
Indicators will be developed by each safety organization based on their strategic goals, strategic plan, mission and regulatory guidance to measure how effectively their organization's safety program is performing. It is not the intent of this regulation to mandate performance indicators for general use, but to require the development of specific measures tailored to the needs of each organization's safety program in accordance with guidance provided in DA Pam 385–10.

2–10. Metrics
Metrics will be developed for each safety program in accordance with guidance provided in DA Pam 385–10.

a. These metrics will include both quantitative and qualitative measures that will provide the proponent of the program, as well as outside agencies, a means of evaluating the program. Examples of metrics that may be applied to safety are rate of accident occurrence, severity and cost, compliance with reporting requirements, corrective action tracking mechanism, regular worksite walk–through inspections for safety, employee training program, management solicitation, and use of and feedback of employee comments.

b. Each safety organization will determine the metrics most appropriate to measuring the effectiveness of their safety program.

c. Data for each metric must be recorded and reviewed with the commander as part of the commander's regular oversight process.

d. Use statistical methods, such as Six–Sigma, when possible to measure effectiveness.

2–11. Program audit
a. Each safety office will be audited for its execution and integration of the Army Safety Program into its organization's mission, both internally and by its higher commands a on periodic basis in accordance with guidance in DA Pam 385–10.

b. These audits will not be compliance audits but rather programmatic audits to measure the overall effectiveness of management controls for integrating the Army Safety Program into their business process and mission execution. Compliance issues may be used as a measure of effectiveness but will not be the primarily focus of the audit.

c. Each organization will conduct and document an annual programmatic audit of their program execution using their performance indicators and matrices.

d. Each level of command will develop and implement an audit program that ensures each subordinate organization is evaluated at least every 12 to 18 months.

2–12. Occupational Safety and Health Administration inspections
In accordance with the provisions of Executive Order 12196 (EO 12196), DODI 6055.1, and within the scope of OSHAct, National Institute for Occupational Safety and Health officials, acting as representatives of the Secretary of Labor, are authorized to conduct announced or unannounced inspections of all Army civilian workplaces except those identified as military–unique workplaces.

Section IV
Safety Committees and Councils

2–13. Department of the Army safety planning
Safety and occupational health committees shall be established at each echelon of Army organizations to assist in the planning, coordination, prioritization, and implementation of OSHA programs. To aid the DASA (ESOH) in developing strategic policy and the ODASAF in developing and implementing policy, and programs, the following councils will be chartered to provide technical advice, participate in program development and maintain various portions of this regulation and supporting DA pamphlets. Each council will meet as needed, but no less than once a year to address issues in their areas of interest.

2–14. Joint councils
Joint councils shall be established as required to coordinate safety activities and functions between the services. The ASA(I&E) and the ODASAF shall take the lead in establishing Joint councils with other Services and Army civilian agencies and selecting representatives to participate in the councils.

2–15. Army Safety Coordinating Panel
The Army Safety Coordinating Panel oversees Army safety strategic planning, and safety and risk management integration in the Army's Transformation.

a. The functions of the panel are to:

(1) Identify opportunities for integrating safety and CRM in synchronization with Army Transformation.

(2) Oversee and assist in coordination of annual action plans that support the Army Safety Strategy.

(3) Assess progress of actions specified in action plans that support the Army Safety Strategy and provide updates to the SA and the CSA.

b. The Army Safety Coordinating Panel will be co–chaired by the DASA (ESOH) and the DAS. It will report through the Vice Chief of Staff, Army to the CSA and through the ASA(I&E) to the SA.

2–16. Army Safety Action Team

a. The functions of the team are to:

(1) Provide the Office of the Chief of Staff Army with recommendations and information involving air and ground equipment safety issues.

(2) Coordinate, expedite, advise, and provide recommended direction to ensure safety correction measures maximize Army readiness, safety and training.

b. The ASAT is composed of principle representatives from ASA(ALT), DCS, G–3/5/7, DCS, G–4 (chairman), DCS, G–8, ODASAF, AMC, appropriate PEO, applicable proponent branch chief, applicable materiel developer for the system being reviewed and advisory members in accordance with the team's charter.

2–17. Department of the Army Safety and Occupational Health Advisory Council

a. The functions of the Department of the Army Safety and Occupational Health Advisory Council (DASOHAC) are to—

(1) Provide an opportunity for senior safety professionals to discuss current safety and occupational health issues affecting execution of the Army Safety Program.

(2) Provide opportunities for advancing and integrating safety and CRM in the Army Safety Program.

(3) Provide an open forum for discussing and sharing new concepts, ideas, programs, and techniques for safety and occupational health.

(4) Recommend changes to this regulation and DA Pam 385–10.

(5) Synchronize Army safety and occupational health direction and initiatives.

b. The DASOHAC is composed of senior safety professionals from designated ACOMs, ASCCs, DRUs, or NGB and FOAs. The council provides technical advice to the DASA (ESOH) and ODASAF for the technical execution of the Army Safety Program. The Assistant for Safety to the DASA (ESOH) will chair the DASOHAC. The Senior Safety and Health Manager, Office of the Director of Army Safety, will serve as secretary.

2–18. Career Program (CP) 12 Career Planning Board

a. The CP12 Career Planning Board will advise and assist CP12 functional chief representative in—

(1) Forecasting and planning for staffing needs.

(2) Reviewing proposals to change the career planning, career planning policy, or the Army Civilian Training, Education, and Development System (ACTEDS) plan.

(3) Ensuring relevancy of job related criteria used in evaluating individuals for referral.

(4) Ensuring that ACTEDS requirements for career planning are fully and economically managed.

(5) Recommending changes or modifications to the ACTEDS master training plan, career ladders, and/or other elements.

(6) Furnishing information to the functional chief representative to support the programming and budgeting of ACTEDS resources.

b. The membership will consist of—

(1) The functional chief representative who serves as chairperson.

(2) The Director of Army Safety's designated representative.

(3) All ACOM, ASCC, DRU, and NGB safety and health PMs.

(4) Designated Central Program Operations Division representative.

(5) Functional representatives for the GS–0018, GS–0803, and GS–1306 career series.

(6) Functional representatives for—

(a) GS–0018, Safety and Occupational Health Managers.

(b) GS–0690 Industrial Hygienists.

(c) GS–0640 Industrial Hygiene Technicians.

(d) GS–0803 Safety Engineers.

(e) GS–1306 Health Physicists.

(f) GS–1815 Air Safety Investigators.

(g) GS–1825 Aviation Safety Inspector career series.

c. Functional representatives are selected by the functional chief representative based on ACOM, ASCC, DRU, and NGB nominations.

d. The functional chief representative serves as co–chairperson and the career management officer serves as the board's recorder.

2–19. The Department of the Army Biological Safety and Health Council

a. The Department of the Army Biological Safety and Health Council (DABSHC) will provide technical guidance and support to the DASA (ESOH) and the ODASAF to assist them in fulfillment of their biological safety function management, policy and standards development, and oversight responsibilities.

b. The Council will make recommendations to changes in the Army's biological safety policy and program management and will provide technical expertise to DASA (ESOH) and ODASAF as required for biological program management and execution and execution (as outlined in this regulation and in DA Pam 385–69).

c. A representative of the ODASAF will chair the DABSHC. The chair will convene and conduct meetings and provide direction to the Council.

2–20. The Department of the Army Chemical Agent Safety Council

a. The Department of the Army Chemical Agent Safety Council (DACASC) will serve as an open forum to elevate and discuss Army chemical agent safety and health policy and program issues at the HQDA level.

b. The council will make recommendations to changes in the Army's chemical safety policy and program management and will provide technical expertise to DASA (ESOH) and ODASAF as required for chemical agent safety program management and execution (as outlined in this regulation and DA Pam 385–61).

c. The DACASC will be co–chaired by a representative of the ODASAF and a representative of AMC.

2–21. The Department of the Army Explosives Safety Council

a. The Department of The Army Explosives Safety Council will be organized as a standing Army council to discuss and resolve Army technical explosives safety policy issues. The council gives selected Army Headquarters a voice in the formation of Army explosives safety policy.

b. The Council will make recommendations to changes in Army's explosives safety policy and program management and will provide technical expertise to DASA (ESOH) and ODASAF as required for explosives safety program management and execution (as outlined in this regulation and DA Pam 385–64, and DA Pam 385–65).

c. A representative from ODASAF chairs the Department of the Army Explosives Safety Council.

2–22. The Department of the Army System Safety Council

a. The Department of the Army System Safety Council will provide technical guidance and support to the DASA (ESOH), ODASAF, and assist them in fulfillment of the Army's system safety function management, policy and standards development, and oversight responsibilities.

b. Membership shall be open to all ACOMs, ASCCs, DRUs, or NGB and FOAs with a system safety mission.

c. The Council will make recommendations for changes in the Army's system safety policy and to DA Pam 385–16.

d. A representative from the Office of the Director of Army Safety will chair the council and a member of the AMC Safety Office will serve as recorder.

2–23. Department of the Army Radiation Safety Council

a. Advisory body. The Department of the Army Radiation Safety Council (DARSC) is the advisory body to Chief of Staff, Army, providing recommendations for Army radiation safety directives, gathering and disseminating information about the status of the Army radiation safety program.

b. Membership. Membership includes the Director of Army Safety as chair, the Army RSO as recorder, the radiological hygiene consultant to TSG, and representatives of the ACSIM, Army Reactor Office (AR 50–7), the Director, IMCOM, and the radiation safety staff officer from each ACOM, ASCC, DRU, and the NGB.

c. Additional radiation councils.

(1) *Army Command, Army Service Component Command, Direct Reporting Unit, and National Guard Bureau Radiation Safety Council*. The council is the advisory body to the ACOM, ASCC, DRU, and NGB commander/IMCOM director that provides recommendations for radiation safety directives, gathers, and disseminates information about the status of the radiation safety program.

(a) Membership includes the commander/director as chair (or a designee who is a senior member of the commander's/director's staff), the RSO (recorder), major subordinate command RSOs. The RSO may not serve as the chair.

(b) Each ACOM, ASCC, DRU, and ARNG Radiation Safety Committee (RSC) should meet at least once each 6–month period and at the call of the chair.

(2) *Installation Radiation Safety Committee*. When the installation commander establishes a RSC—

(a) The installation RSC is the advisory body to the Installation commander that gathers and disseminates information about the status of the installation radiation–safety program.

(b) Membership includes the installation commander as chair (or a designee who is a senior member of the commander's staff), the installation RSO (recorder), and all tenant RSOs. Installations with large numbers of TOE unit personnel that use radioactive commodities will include military representatives knowledgeable about the TOE units' radiation safety programs.

(c) Each installation RSC will meet at least once each calendar year and at the call of the chair.

(3) *Radiation Safety Committee*. When a technical publication or condition of an Nuclear Regulatory Commission license, Army reactor permit, or ARA requires a RSC, it will meet the following requirements in addition to any other requirements of applicable directives:

(a) The RSC will meet at least once in each 6–month period and at the call of the chair.

(b) The commander or a designated representative (someone at the executive level in the organization who is not a radiation user) should chair the RSC. The RSO should be the recorder and will be a voting member.

2–24. Safety and Occupational Health Advisory Council

Army Headquarters and installations will establish Safety and Occupational Health Advisory Councils composed of management, military and Army civilian operating personnel.

a. Such councils will be chaired by the commander or the commander's designee, who will be a senior management official.

b. Councils will meet at least semiannually and will publish the minutes of the meetings.

c. Army Headquarters commanders may exempt installations having small populations from the requirements of this paragraph.

d. Establishment of councils at other than installation level will be at Army Headquarters' discretion.

e. Commanders of separate detachments, companies and above will establish a Soldier and Army Civilian Employee Safety Committee. The committee will be representative of the workforce within the organization. The number of committee members shall be based on the size, safety needs and diversity of the operations performed by the organization. Committee members shall receive appropriate training to perform duties, and may be assigned responsibilities for operational safety matters. The safety committee members shall—

(1) Review safety suggestions.

(2) Review accident reports and recommend corrective measures to prevent recurrence.

(3) Review suspected unsafe or unhealthful working conditions and corrective measures.

(4) Promote safety education within the organization.

(5) Conduct periodic self–assessments in their areas of responsibility and coordinate with the organization's safety office.

2–25. Safety conferences

a. The ODASAF will host Armywide safety conferences to promote professional development and address safety issues facing the Army.

b. The ACOM, ASCC, DRU, and NGB safety offices will host safety conferences as necessary. These conferences will address ground, aviation and other safety topics.

Chapter 3
Accident Investigation and Reporting

3–1. Introduction

This chapter provides policies and procedures for initial notification, investigating, reporting, and submitting reports of Army accidents and incidents.

3–2. Policy

Army policy is to investigate and report Army accidents to prevent like occurrences. All Army accidents will be investigated, reported (to include immediate notification as specified in this regulation), and analyzed in accordance with the requirements of this regulation, DA Pam 385–40, USACRC use and preparation guides, and other USACRC developed tools for accident investigation and reporting.

3–3. Army accident

An Army accident is defined as an unplanned event, or series of events, which results in one or more of the following:

a. Occupational illness to Army military or Army civilian personnel.

b. Injury to on–duty Army civilian personnel.

c. Injury to Army military on–duty or off–duty.

d. Damage to Army property.

e. Damage to public or private property, and/or injury or illness to non–Army personnel caused by Army operations (the Army had a causal or contributing role in the accident).

3–4. Accident and incident classes

Accident classes are used to determine the appropriate investigative and reporting procedures. Accident classes are as follows:

a. Class A accident. An Army accident in which the resulting total cost of property damage is $1,000,000 or more; an Army aircraft or missile is destroyed, missing, or abandoned; or an injury and/or occupational illness results in a fatality or permanent total disability. Note that unmanned aircraft systems (UAS) accidents are classified based on the cost to repair or replace the UAS. A destroyed, missing, or abandoned UAS will not constitute a Class A accident unless replacement or repair cost exceeds $1,000,000 or more.

b. Class B accident. An Army accident in which the resulting total cost of property damage is $200,000 or more, but less than $1,000,000; an injury and/or occupational illness results in permanent partial disability, or when 3 or more personnel are hospitalized as inpatients as the result of a single occurrence.

c. Class C accident. An Army accident in which the resulting total cost of property damage is $20,000 or more, but less than $200,000; a nonfatal injury or occupational illness that causes 1 or more days away from work or training beyond the day or shift on which it occurred or disability at any time (that does not meet the definition of Class A or B and is a lost time case).

d. Class D accident. An Army accident in which the resulting in total cost of property damage is $2,000 or more, but less than $20,000; a nonfatal injury or illness resulting in restricted work, transfer to another job, medical treatment greater than first aid, needle stick injuries and cuts from sharps that are contaminated from another person's blood or other potentially infectious material, medical removal under medical surveillance requirements of an OSHA standard, occupational hearing loss, or a work–related tuberculosis case.

e. Class E aviation accident. An Army accident in which the resulting total cost of property damage is less than $2,000.

f. Class E aviation incident. When the mission (either operational or maintenance) is interrupted or not completed due to a fair wear and tear failure or malfunction of a component or part. Intent for flight may or may not exist. Fair wear and tear failure or malfunction of items found on preflight or postflight inspections do not apply.

g. Class F aviation incident. Recordable incidents are confined to aircraft turbine engine damage because of unavoidable internal or external foreign object damage, where that is the only damage (does not include installed aircraft auxiliary power units). These incidents will be reported using DA Form 2397–AB–R (Abbreviated Aviation Accident Report); check "F" in the "Accident Classification" block. Note that when appropriate, it is the unit commander's responsibility to ensure that an SF Form 368 (Product Quality Deficiency Report) or equipment improvement report (EIR) for Category II or message for Category I is completed and forwarded to the appropriate agency per AR 750–6, DA Pam 750–8, or DA Pam 738–751. The USACRC and the appropriate Army Headquarters will be information addressees on all Category I EIRs and product quality deficiency reports.

3–5. What to report

Commanders/supervisors will investigate and report in accordance with paragraph 3–8*b* to the unit/local safety office unplanned events that result in one or more of the following:

a. Injuries and occupational illnesses.

(1) Injury or occupational illness (fatal or nonfatal) to on–duty or off–duty military personnel.

(2) Injury or occupational illness (fatal or nonfatal) to on–duty Army civilian personnel, including nonappropriated fund employees, and foreign nationals employed by the Army when the accident is incurred while performing work-related duties.

(3) Injury or illness to non-Army personnel as a result of Army operations.

(4) Soldier training related deaths not covered in subparagraphs 3–5*a*(1) through 3–5*a*(3) (see glossary for definition of a training related death).

(5) Persons who are missing, and/or presumed dead, as the result of a potential accident will be reported as accident fatalities.

(6) Occupational injuries and illnesses reported by a contractor or subcontractor where accident reporting to the Army is contractually required.

(7) Injury or occupational illness to on–duty contractors supervised by Army personnel on a day–to–day basis.

(8) Fatal accidents involving members of the visiting public when involved in authorized recreational activities on Army facilities, installations, and properties, to include all Title 36 USACE properties.

(9) Incidents involving Army civilian personnel injured as a result of violence in the work environment will be reported to the U.S. Department of Labor in accordance with 29 CFR 1904.5.

b. Damage to Army property. This includes Government furnished material (GFM), or Government furnished property (GFP), or GFE provided to a contractor.

c. Damage to public or private property. Damage to public or private property caused by Army operations (the

Army had a causal or contributing role in the accident). Note that commanders will investigate unplanned events and make the decision as to whether the event is an accident, combat loss, or some other category of loss.

3–6. Types of accidents and incidents

When 2 or more types of Army vehicles, such as an AMV and an Army combat vehicle (ACV) are involved in an accident, the type of equipment operated by the individual deemed most responsible will determine the accident type. This process is also true for other types of accidents (for example, fire, marine, explosives) (see DA Pam 385–40).

3–7. Non–reportable events

The following events are not reportable through safety channels:

a. Combat losses. Damage or injury as a direct result of action by an enemy force is not an Army accident. It is termed a combat loss when one or more of the following conditions exist:

(1) Damage, loss, or injury directly caused by enemy action or sabotage.

(2) Damage, loss, or injury due to evasive action taken to avoid enemy fire.

(3) Loss of equipment in combat or failure of an individual to return from a combat mission when the last known position was in or over enemy territory.

b. Malfunctions or failure of parts that are normally subject to fair wear and tear and have a fixed useful life less than the complete weapon system or unit of equipment are not considered accidents if the malfunction or failure is the only damage and the sole action is to replace or repair that component part. (The only exception is that all fires or fire damage involving vehicle component parts must be reported.) Although these occurrences do not constitute an Army accident, they may meet the criteria of a Class E aviation incident and should be reported accordingly. When a malfunction or failure of a component part results in damage to another component, this paragraph does not apply.

c. Damage to Army equipment or property that is planned, intended, or expected during authorized testing or intentional destruction is not considered an accident. "Planned and intended" means that the damage was specifically required to accomplish the objectives of a formally authorized test or was the desired outcome of an authorized destruction or disposal of property. This includes damage to test fixtures designed to provide protection. Any unplanned and unintended damage incurred during these operations will be reported as an accident.

d. Intentional, controlled jettison or release, during flight, of canopies, cargo, doors, drag chutes, hoist cable, jungle penetrator, hatches, life rafts, auxiliary fuel tanks, missiles, drones, rockets, non–nuclear munitions, and externally carried equipment not essential to flight. When there is no injury, no reportable damage to the aircraft or other property, and in the case of missiles, drones or non–nuclear munitions, when the reason for jettison is not malfunction.

e. Property damage as a result of vandalism, riots, civil disorders, or felonious acts such as arson. Damage to Army aircraft, vehicles, or any other property which occurs after an aircraft or vehicle has been stolen is not reportable as an accident. Damage to Army aircraft, vehicles, or any other property, which occurs when an individual misappropriates an aircraft or vehicle not authorized to be flown or driven by the individual will not be reported as an accident.

f. Deliberate damage to aircraft or equipment or injury to aircraft or equipment occupants. Such damage and injury—

(1) Will be reported to the military police (MP) or the Criminal Investigation Command (CIC) for investigation.

(2) Will also be investigated by a collateral board that will determine responsibility.

g. Mishaps that involve factory new production aircraft prior to the Government accepting risk of damage or loss are reported as contractor mishaps.

h. Accidents occurring during the transportation of Army materiel by commercial carriers.

i. Army equipment leased, on bailment, or loaned to contractors, commercial airlines, other Government agencies, or foreign Governments, when the lessee has assumed risk of damage or loss.

j. Civil aircraft owned by civil operators and accomplishing contract air missions for the Army.

k. Injuries associated with non–occupational diseases, when the disease, not the injury, is the proximate cause of the lost time, such as diabetes and its resultant complications like loss of vision. Complications of the injury (such as the infection of a cut aggravated by a work–related activity) that result in lost time are reportable.

l. Suicide or attempted suicide, homicide, or intentionally self–inflicted injuries. For incidents involving Army civilians, see paragraph 3–5*a*(9).

m. Injuries resulting from altercations, attack, or assault, unless incurred in the performance of official duties (for example, MPs).

n. Injuries sustained before entry into military service or employment by the United States Government, unless specifically aggravated by current tenure of service.

o. Illnesses caused by specific organisms and toxins (such as food–borne disease), unless the disease is directly related to or the result of the worker's employment.

p. Minimum stress and strain (simple, natural, and nonviolent body positions or actions, as in dressing, sleeping, coughing, or sneezing.) These are injuries unrelated to accident producing agents or environments normally associated with active participation in daily work or recreation.

q. Hospitalization for treatment where the patient is retained beyond the day of admission solely for administrative reasons. Hospitalization for observation or administrative reasons not related to the immediate injury or occupational illness.

r. Injuries or fatalities to persons in the act of escaping from or eluding military or civilian custody or arrest.

(1) Death due to natural causes unrelated to the work environment (see glossary for definition of a training related death as it relates to a non–training related death due to natural causes).

(2) Adverse reactions resulting directly from the use of drugs under the direction of competent medical authority.

(3) Death or injury resulting solely from the use of alcohol, illegal drugs, or other substances.

s. Pre–existing injuries musculoskeletal disorders unless aggravated or accelerated by Federal employment.

3–8. Initial notification and reporting of Army accidents

Persons involved in, or aware of, an Army accident will report it immediately to the commander or supervisor directly responsible for the operation, materiel, or persons involved.

a. Initial notification. The commander or supervisor who first becomes aware of any Class A or B Army accident or Class C Army aviation (flight, flight related, and aircraft ground, or UAS) accident will, through their chain of command, immediately notify—

(1) The immediate commander or supervisor of all personnel involved.

(2) The commander, USACRC. The primary method for immediate notification is through the Web–based initial notification (IN) tool located on the USACRC Web site at https://crc.army.mil/home. Checklists for compiling the necessary ground or aviation accident information to complete the IN tool report are provided. The secondary method for immediate notification is by telephone (DSN 558–2660/558–3410, commercial (334) 255–2660/255–3410).

(a) At a minimum, notification will include the information on DA Form 7306 (Worksheet for Telephonic Notification of Ground Accident). Using the IN tool meets this requirement.

(b) At a minimum, notification will include the information on DA Form 7305 (Worksheet for Telephonic Notification of Aviation Accident/Incident). Using the IN tool meets this requirement.

(c) For all Class A and B on–duty accidents and Class C Aviation, immediate notification of accidents will be followed by CAI or installation–level accident investigation (IAI).

(d) For Class A and B off–duty accidents, at minimum, immediate notification of the accident will be followed with an investigation.

(3) The U.S. Department of Labor. Within 8 hours after the death of any Army civilian employee from a work–related incident or the in–patient hospitalization of 3 or more civilian employees as a result of a work–related incident, an activity representative must orally report the fatality/multiple hospitalization by telephone or in person to the area office of the OSHA, U.S. Department of Labor, that is nearest to the site of the incident. The representative may also use the OSHA toll–free central telephone number, 1–800–321–OSHA (1–800–321–6742).

(4) The USACRC, in the event a safety–of–use, safety–of–flight, or ground precautionary message issue is identified. The accident board investigator or the commander responsible will contact the USACRC immediately by telephone (334–255–2660/334–3410).

b. Reporting. All accident reports will be submitted using the USACRC's online accident reporting tool (preferred method) or the appropriate forms in accordance with DA Pam 385–40 and USACRC's use and preparation guides.

(1) *Class A, B, and C on–duty accidents*. For all Class A, B, and C on–duty accidents, the report of investigation will be completed and submitted to USACRC within 90 calendar days.

(2) *Off–duty accidents*. For all off–duty accidents and other classes of on–duty accidents, the report of investigation will be completed and submitted to the USACRC within 30 calendar days.

(3) *Safety and Occupational Health Program injury/illness log*.

(a) Department of the Army installations and/or the responsible safety office for the employees will be provided the required information necessary to meet the OSHA recordkeeping requirements (see DA Pam 385–40).

(b) Using the standards outlined in the OSHAct, DA installations and/or the safety office in the employees chain of command are responsible for ensuring that injuries and occupational illnesses to Army civilians as defined in this regulation and contractors specified in paragraph 3–5 are recorded using the appropriate Army accident reporting forms in accordance with paragraphs 3–8*b*(1) and 3–8*b*(2). Note that although a report is required, contractor accidents will not be counted as Army accidents unless one of the conditions listed in paragraph 3–3 exist. They are further responsible for maintaining an OSHA Form 300 (Log of Work–Related Injuries and Illnesses) in accordance with OSHAct standards. At the end of each calendar year, safety offices will post OSHA Form 300A (Summary of Work–Related Injuries and Illnesses), from 1 February to 30 April of the year following the year covered by the form. The senior commander or management official of the installation or activity will certify and sign the accident log annually. These records will be retained for 5 years in accordance with the OSHAct.

(4) *Contractor accidents involving Army property and personnel*.

(a) Government contractor involvement. If the Army administers the contract and the accident involves reportable damage to Army equipment or injury to Army personnel, the Army agency administering the contract is the convening

authority. The convening authority will ensure the accident is investigated and reported in accordance with this regulation and the terms of the contract. If the Army administers the contract and the mishap involves reportable damage or injury to another DOD agency, the Army Headquarters administering the contract will ensure all mishap information is sent to the involved agency with an information copy to USACRC. If another DOD agency administers the contract and the mishap involves reportable damage or injury to the Army, the Army Headquarters that owned the resources will request the contracting agency investigate and report.

(b) Mishaps involving nonaccepted Army equipment. The Army Headquarters that negotiates the contract for the equipment is the convening authority. The convening authority is responsible for the safety investigation and reporting, although the equipment may not be under the operational control of the Army. The loss is recorded as a mishap to the DA account.

(c) Mishaps involving equipment bailed to a non–DOD organization. Mishaps involving equipment bailed to a non–DOD organization for modification, maintenance, repair, test, contract training, or experimental project for a DOD component, when the Government has assumed ground and flight risk. The Army Headquarters that negotiates the contract for the materiel is the convening authority. The convening authority is responsible for the safety investigation and reporting, although the equipment may not be under the operational control of the Army. The loss is recorded as a mishap to the Department of the Army account.

(d) Other equipment contractor mishaps. If a mishap involves GFE or bailed equipment, or new production equipment (accepted by the Army on a DD Form 250 (Material Inspection and Receiving Report), but not delivered), the Army Headquarters of the command negotiating the contract/bailment is the convening authority unless otherwise specified in the contract/bailment agreement. In cases where contract/bailment agreements specify investigative jurisdiction, follow the terms of such agreements. In no case will a non–Army agency have safety investigation jurisdiction. Army personnel who are involved in a vehicle accident while operating a Government vehicle (tactical or non-tactical) will, if possible, complete an SF Form 91 (Motor Vehicle Accident Report) before leaving the scene of the accident. A complete SF Form 91 is required even if the damage to the motor vehicle is not noticeable. The operator of the vehicle will furnish copies of the completed SF Form 91 to military law enforcement and unit safety personnel as requested.

c. Notification and reporting of accidents occurring in combat. Notification to USACRC for all on–duty Class A, B, and aviation Class C accidents will be immediate. The senior tactical commander may determine that the situation, conditions, and/or time does not permit normal investigation and for accident report submission. For all other classes of accidents, notification and reporting procedures will be in accordance with other sections of this regulation.

(1) Authority to waive normal investigation and reporting procedures for Class A and B accidents is delegated to the senior tactical commander at the level determined appropriate by the Army Headquarters, theater Army, or equivalent level. Whenever possible, normal investigations should be conducted on all accidents with potential Armywide impact (for example, materiel failure accidents). In cases in which normal investigation and reporting will not be performed, the report of investigation will identify that fact and the name and rank of the official who authorized the waiver.

(2) Notification will be immediate via IN tool, e–mail, message (via Defense Message System), or telephone to the USACRC. The notification will include as much of the information required by the telephonic worksheet as can be determined.

(3) A completed report must be submitted as soon as conditions permit, no later than 60 calendar days, and will serve as the official accident report. No follow–up is required.

3–9. Accountability for Army accidents

a. The purpose of accountability in this regulation is to address the most likely organization to affect corrective actions. Accidents normally will be charged in this order of precedence—

(1) The unit or element having operational control of the equipment or facility.

(2) The unit having operational control of the most responsible person.

(3) The unit or organization to which the injured person(s) is assigned.

b. Exceptions to the above include, but are not limited to, the following:

(1) *Design–induced failure or malfunction*. An Army accident caused solely by design–induced failure or malfunction will be recorded as a "materiel" accident and will be charged to a special HQDA accident account. The unit experiencing the failure or malfunction is required to submit an EIR or SF Form 368 product quality deficiency report. A copy of the EIR/SF Form 368 will be submitted with each accident report that identifies a material defect as a primary/contributing or secondary/noncontributing cause factor.

(2) *Environmental factors*. Accidents caused solely by environmental factors (for example, high winds, hail, lightning) will be reported and recorded in ASMIS as an "environmental" accident. They will be charged to a special HQDA account unless the accident could have been avoided by command action. If the accident investigation board determines an accident could have been avoided by the command taking preventive action, the accident will be charged to the activity having operational control of the equipment or the activity to which the persons involved in the accident are assigned.

(3) *Special cases*.

(a) Accidents involving persons on temporary duty (TDY) pass, or military leave will be charged to the activity or

Army Headquarters to which the person is permanently assigned. For the military, "permanently assigned" means on the Standard Installation/Division Personnel System or Military Personnel Office unit strength report. For Army civilians, it means assigned by current SF Form 50–B (Notification of Personnel Action).

(b) Accidents involving Army students and foreign military students on TDY, longer than 30 days at an Army school, will be charged to the school's Army Headquarters.

(c) Accidents involving military personnel in permanent change of station (PCS) status (with or without leave) or Army civilians in PCS status will be charged to the losing unit. The PCS status ends on the assignment order reporting date or arrival date, whichever occurs first.

(d) Accidents involving Soldiers assigned to a personnel control facility for disciplinary reasons, pending separation in which the Soldier is not under the control of the facility, or after being dropped from the unit rolls while in an absent without leave status at the time of the accident will be charged to a DA account.

c. If a conflict in determining accountability between Army Headquarters cannot be resolved within command channels, the commanders involved will submit a formal request for decision to the DASAF. The request will include a summary of circumstances, statements of involved commanders, and recommendations. These actions are separate from accident investigation requirements and will not restrict or impede the investigation and reporting process. The final determination for accountability will be made by the DASAF based on—

(1) Teardown and analysis results.

(2) Recommendations and analysis prepared by the accident investigation board.

(3) Analysis of the accident report.

(4) Analysis of the EIR/SF Form 368.

(5) Any combination of (1) through (4), above.

d. In the event of an accident that involves 2 or more DOD components, each DOD component shall report its own losses.

3–10. Categories of accident investigation reports

The Army has 2 categories of safety accident investigation reports— limited use reports and general use reports.

a. Limited Use Safety Accident Investigation Reports. These are close–hold, internal communications of DA whose "sole" purpose is prevention of subsequent DA accidents. They are required for all flight/flight related and fratricide/friendly fire accidents. They are authorized for use in certain accidents as explained in subparagraph (3), below.

(1) Since much of this information is available only from persons directly or indirectly involved in the accident, a means must be provided to establish frank and open exchange of such information without fear of recrimination or other adverse action.

(2) All persons who provide information to accident investigators in this category under a promise of confidentiality may be assured that DA will use its best efforts to honor the promise if the record containing the information becomes the subject of a request under the Freedom of Information Act (FOIA), and will not voluntarily disclose this information.

(3) In addition to flight accidents and fratricide/friendly fire accidents, Limited Use Safety Accident Investigation Reports may be used for accidents involving other complex weapon systems, equipment, or military–unique items (such as ships and shipboard systems, guided missiles, laser devices, or armored vehicles), and military–unique equipment/operations/exercises when the determination of causal factors is vital to the national defense. The selection of system categories to be included in this application of Limited Use Safety Accident Investigation Reports is delegated to the Commander, USACRC.

(4) The following restrictions are imposed on the handling of Limited Use Safety Accident Investigation Reports:

(a) Reports shall not be used, before any evaluation board, as evidence or to obtain evidence for disciplinary action, in determining the misconduct or line of duty status of any personnel, or to determine liability in administrative claims for or against the Government. In limited use investigations, witnesses may be given the option of making their statement under a promise of confidentiality if they are unwilling to make a complete statement without such a promise and the investigation board believes it is necessary to obtain a statement from a witness.

(b) To the extent permissible under the law, these reports shall not be released in their entirety to the public or any Federal agency outside of DOD. Subject to court order to the contrary, reports may not be used in any legal proceeding, civil or criminal. Department of Defense will use its best efforts to seek available appellate review of a court order to release a report. Exceptions to the foregoing are stated in subparagraph (*c*), below.

(c) Portions of the safety investigation reports are privileged. The privileged portions include findings, recommendations, and analysis of the accident board, and confidential witness interviews. Excerpts from safety investigation reports comprised of purely factual material, such as date, time, location, type system, weather, maps, and transcripts of air traffic communications, may be released to other investigators and to the public subject to traditional FOIA exemptions. Only the initial denial authority, the Commander, USACRC, may authorize release of information protected under FOIA. Transcripts of relevant portions of intra–cockpit voice recordings may be included in the report and released to the accident legal investigation board; however, recordings of intra–cockpit voice communications may only be released outside of DOD upon specific authorization of the Commander, USACRC.

(d) The notation "Limited Use Safety Accident Investigation Report" shall be used for the identification of these reports.

b. General Use Safety Accident Investigation Reports. These are reports prepared to record data concerning all recordable DA accidents not covered by Limited Use Safety Accident Investigation Reports. These reports are intended for accident prevention purposes and will not be used for administrative or disciplinary actions within DOD. Portions of these reports that contain privileged material, such as investigative findings, analyses, and recommendations, are not generally releasable to the public, to any Federal agency outside of DOD, or within DOD except to requesters who have a need to know for the purpose of accident prevention. Witnesses will be advised that their statements may not be used for internal DOD disciplinary purposes. The information will be treated as exempt from mandatory disclosure in response to a request under the FOIA.

c. Safety and legal accident investigation reporting. Commanders may initiate a legal accident investigation (formerly known as a collateral investigation) to obtain and preserve all available evidence for use in subsequent administrative or legal actions. The safety accident investigation has priority over a legal accident investigation.

(1) Legal accident investigations are used to obtain and preserve all available evidence for using in litigation, claims, disciplinary action, or adverse administrative actions. They are essential for the protection of the privileges afforded to accident investigation reports, as they ensure there is an alternative source of evidence for use in legal and administrative proceedings. Although nonprivileged information acquired by a safety accident investigator shall be made available to the collateral investigation, the latter is conducted independently and apart from other types of accident investigations.

(2) Safety personnel (assigned or MOS–trained) and personnel responsible for conducting accident investigations will not conduct, review, evaluate, assist with, or maintain on file the collateral investigation. However, safety personnel can use and shall be given access to any information in a collateral legal/administrative investigation.

(3) This type of investigation will be prepared—

(a) On all Class A accidents. Note that a line of duty investigation will satisfy this requirement for off–duty fatalities.

(b) As directed by the command's Staff Judge Advocate (SJA) or legal counsel in accordance with the claims regulation (AR 27–20).

(c) On those accidents where there is a potential claim or litigation for or against the Government or a Government contractor.

(d) On accidents with a high degree of public interest or anticipated disciplinary or adverse administrative action.

(4) A legal accident investigation may be conducted on any other accident at the direction of the commander whose personnel, equipment, or operations were involved in the accident. The investigation will usually use the procedures in AR 27–20 because most will involve potential claims. If that regulation is not applicable, the procedures in AR 15–6 for informal investigations will be followed.

3–11. Actions when criminal activity is determined

a. If evidence of intentional criminal activity is discovered during the initial investigation by either MP/CID or the accident board, the board president will be notified immediately. After notification/consultation with the Commander, USACRC and the local commander, the board president will discontinue the investigation if no further need is present. If the accident investigation does continue, it will be secondary to MP or CID investigations insofar as access to witnesses, accident scene, and evidence is concerned.

b. If, during the investigation, the board discovers evidence of intentional criminal activity (other than negligence, dereliction of duty, or disobedience of an order); the board president will provide the following to MP/CID investigators—

(1) If the evidence is physical or is a common source item, MP/CID investigators will be notified. The evidence will be surrendered to MP/CID personnel, and the board members will provide the documents necessary to establish the chain of custody.

(2) If the evidence is based upon witness statements obtained on a promise that the information would be used within DOD only for accident prevention purposes, the board president will provide a list of personnel interviewed and copies of all common source materials. The board president will not discuss individual statements or specific comments that led to the board's suspicion of criminal activity.

3–12. Accident Investigation Board appointing authority

a. The commander having general court–martial jurisdiction over the installation or unit responsible for the operation, personnel, or materiel involved in an accident, or the Commander, U.S. Army Reserve Command (USARC), for U.S. Army Reserve (USAR) units assigned to USARC, or the Commander, USACE for personnel assigned to the USACE, or the appropriate State Adjutant General in the case of ARNG accidents, is responsible for appointing accident investigation boards as required by this regulation. Exception to the general court–martial convening authority (GCMCA) requirement of this paragraph may only be granted by HQDA (DACS–SF) upon request.

(1) When personnel or materiel involved in an accident are from units under the command of different GCMCAs,

the convening authorities concerned should agree on who will appoint the board. Their decision should be based on their relative degrees of involvement as well as considerations of administrative convenience. If an agreement cannot be reached, the decision will be made by the first general officer in both chains of command or by the respective Army Headquarters commanders.

(2) When an accident occurs away from the responsible unit's home station, the officer who would normally appoint the board may request the GCMCA for the installation closest to the accident or upon which the accident occurred to conduct the investigation. Coordination for such a transfer of authority should include specific agreement on funding the cost of the investigation.

(3) For accidents involving USAR personnel on active duty for training status, assigned or attached to a command other than USARC, the officer who exercises GCMCA over the accident site will appoint accident investigation boards.

(4) In some cases, the unit or installation that is responsible for the personnel, equipment, or operation involved in the accident may be under the command of a different Army Headquarters than the GCMCA who would normally appoint the board. In this case, the two Army Headquarters commanders may enter into supplemental agreements that provide for a different appointing authority.

b. The appointing authority will—

(1) Appoint on orders the president and other members of the board from units or organizations other than the accountable organization. Individuals from the accountable organization may be designated as advisers (nonvoting) to enhance the investigation and reporting of the accident.

(2) Request support from higher headquarters when investigation requirements are beyond the unit's capability. However, USACRC is the sole authority for requesting outside Army, Government, and public or private agency assistance.

(3) Give priority to accident investigation and reporting duties to ensure prompt completion of accident reports. Appointing authorities will ensure that adequate clerical and administrative support is available to assist in the rapid completion of accident investigations.

(4) Ensure that no member of the board has a personal interest in the outcome of the accident investigation.

3–13. Types of safety accident investigation boards

Two types of boards may be convened, either CAI or IAI. Upon notification of a Class A or B accident, the Commander, USACRC will determine whether a CAI or IAI will be conducted.

a. Centralized Accident Investigation Board.

(1) The USACRC will provide the following information to the board appointing authority:

(a) Name, rank, security clearance, and social security number of USACRC board members.

(b) The special requirements and desired qualifications for local board members (for example, instructor pilot, flight surgeon, vehicle technician).

(2) The board appointing authority will—

(a) Appoint a member of the local safety office to serve as point of contact for the board.

(b) Assure that preliminary actions required by this regulation are initiated before arrival of the USACRC board members. At a minimum, these actions include, but are not limited to, the following:

1. Administrative and logistical support for the investigation board. Note that CAI board members deployed into a combat zone for Army accident investigation purposes will be attached (for all administrative and logistical support) to the highest level of Army command having responsibility for theater.

2. Fund all support costs other than travel and per diem costs of USACRC personnel and those other Government, public or private agency personnel specifically requested by USACRC to provide assistance.

3. Secure the accident scene and take action as required by this regulation.

4. Obtain copies of personnel, medical, and training records (to include licensing and qualification records) for all personnel directly involved in the accident.

5. Identify and notify local board members.

6. Publish orders appointing investigation board.

7. Confirm personnel security clearances as necessary and obtain any special clearances necessary for access to the accident scene by all board members.

8. Provide logistical support to include equipment to recover wreckage and resources necessary to ship components to the appropriate Army depot or lab for teardown analysis, and arrange for special transportation such as tactical vehicles or aircraft, if required, to transport the board members to the accident scene.

9. Obtain the following witness information: name, rank, unit, and telephone number.

10. Obtain Serious Incident Report, MP, and CID reports, if completed.

11. Obtain name of medical officer conducting autopsy and the date, time, and location it will be/was performed and results.

12. Obtain a map that includes the accident site.

13. Obtain directives that pertain to the operation that resulted in the accident.

14. Obtain weather statements (signed by forecaster).

15. Provide any other data or information requested on the USACRC pre–coordination checklist sent by the board president.

b. Installation–Level Accident Investigation Board.

(1) The appointing authority will appoint on orders a board to investigate all on–duty Class A and B accidents and Class C aviation accidents except those investigated by USACRC accident investigation boards.

(2) The appointing authority will ensure a board of any accident designated by HQDA or an Army Headquarters performs an in–depth investigation.

(3) In addition to the above requirements, the appointing authority may elect to conduct IAI (board mandatory or board optional) of any type of accident.

3–14. Accident Investigation Boards

a. The following accidents will be investigated in accordance with DA Pam 385–40 by a board consisting of a minimum of 3 members:

(1) All on–duty Class A and B accidents.

(2) Any accident, regardless of class, that an appointing authority or the Commander, USACRC believes may involve a potential hazard serious enough to warrant investigation by a multimember board.

b. Class C aircraft accidents (flight, flight related, or aircraft ground, UAS) will be investigated by a board of at least 1 member.

c. While the following accidents do not require formal board appointment orders, they will be investigated by 1 or more officers, warrant officers, safety officers/noncommissioned officers (NCOs), supervisors, or DA safety and occupational health specialist/manager/engineer, in the grade of GS–018/803–9 or higher:

(1) All off–duty military accidents.

(2) Class C and D ground accidents.

(3) All aircraft Class D, E, and F accidents/incidents.

d. When an accident involves Army property and another Service's property, a single Joint board may be convened. Board members may be from the 2 Services involved. Appointment of the members and identification of a senior member as president will be made by mutual agreement between the commanders of the safety centers. For uniform reporting within each Service, the board's proceedings will be recorded in the format required by each Service.

e. When an Army aircraft accident involves a civil aircraft or function of the Federal Aviation Administration, compliance will be per AR 95–30. Army aircraft accidents that involve aircraft of treaty nations will be investigated in accordance with DA Pam 385–40.

3–15. Board composition

a. The following personnel may serve on Army safety accident investigation boards:

(1) Army officers or warrant officers (Army aviators for aircraft accidents).

(2) Department of the Army safety and occupational health specialist/manager/engineer, GS–018/803–9 or higher (for aircraft accidents, one who directly manages an aviation safety program).

(3) Full–time technicians who hold current federally recognized officer or warrant officer status.

(4) Department of Defense medical officers or DOD contracted medical officers (flight surgeons are preferred for aircraft accidents).

(5) Qualified DOD maintenance personnel.

(6) Senior NCOs when they are considered subject matter experts for the equipment or operation involved.

(7) E–5 and above with an MOS of 93U, 33U, or 52D, for investigations of UAS accidents.

(8) DOD weather officers.

(9) Any other personnel approved by Commander, USACRC.

b. The safety accident investigation board appointing authority will be as specified in paragraph 3–12.

(1) Voting members will be screened to ensure they do not have an interest in the accident that may bias the outcome of the investigation.

(2) Personnel appointed as advisors are nonvoting participants. Local advisors function to enhance and expedite accident investigation and reporting. Local advisors will normally consist of the safety office point of contact and a point of contact from the organization incurring the accident. In cases where equipment involved is unique to one organization or activity at a location, technical personnel from the organization incurring the accident may be used in an advisory status at the discretion of the board president.

c. Personnel of other services may be used as members of Army accident investigation boards; however, a participant from another Service will not be designated as president of the board. Investigation and reporting will conform to this regulation and DA Pam 385–40. If assistance is required in obtaining members from other Services, the request will be forwarded to USACRC.

d. For on–duty Class A and B accidents, individuals appointed as board members will not be from the unit that incurred the accident (that is, same battalion, company, or detachment).

(1) The president of the board will be a field grade officer (W4/W5 is considered field grade) or an Army civilian, familiar with the type of operation, in the grade of GS–12 or higher.

(2) One member will be appointed to act as recorder.

(3) When an accident involves any of the following, a medical officer or flight surgeon (if a flight surgeon is not available, an Army medical officer may be appointed) is required to be a board member. In the case of an on–duty Army civilian accident, a medical advisor is sufficient.

(a) Personal injuries.

(b) Issues (including injuries) associated with personnel protective equipment, egress from the aircraft, medical evacuation, rescue, or survival.

(4) One member will be a qualified maintenance officer or technician if materiel is involved.

(5) One member may be a qualified weather officer if/when weather is a suspected factor.

e. Class A and B aviation accidents specific board requirements.

(1) *Manned aircraft accidents*.

(a) One member will be a master or senior Army aviator.

(b) One member (who could be the master or senior aviator) will be qualified in the mission, type, design, and series of the aircraft involved for class A or B accidents.

(2) *Unmanned aircraft systems*.

(a) One member will be an Army aviator.

(b) One member will be qualified in the mission, type, design, and series of the UAS involved with an MOS of 96U, 33U, or 52D in the grade of E5 or higher.

(3) For watercraft accidents, at least 1 board member will be an Army Marine warrant officer or a Army civilian familiar with boat operations, navigation, and boating safety.

f. In the case of Class C aircraft accidents, when more than 1 individual is on the board, the president will be an Army officer, senior warrant officers (CW3 and above), a Army civilian in the grade of GS–11 or higher that directly manages an aviation safety program, or a full–time ARNG or USAR technician. In addition, a flight surgeon (if not available, an Army medical officer may be appointed) is required to be a board member when an accident involves—

(1) Personnel injuries.

(2) Issues (including injuries) associated with personnel protective equipment, aircraft egress, medical evacuation, rescue, or survival. Note that for one–member boards, the board president must be senior in grade to the aircraft crewmembers. Also, Class C UAS accidents do not require a rated Army aviator board member.

g. Specific duties and responsibilities of board members are outlined in DA Pam 385–40.

3–16. Support of Army safety accident investigations

a. Army medical treatment facility (MTF) commanders will support accident investigations as required by accident investigation board presidents or unit investigators. This will include, but not be limited to, the following:

(1) Evaluating human and environmental factors that contributed to the accident.

(2) Providing medical, dental, and medical service corps personnel such as flight surgeons, radiologists, pathologists, dentists, industrial hygienists, and psychiatrist to serve as members or advisors to accident investigation boards.

(3) Performing biochemical testing of personnel involved in or contributing to a Class A, B, or C aviation accident, or when deemed appropriate by the commander or physician (consult with the Armed Forces Institute of Pathology (AFIP), commercial (301) 319–0000, DSN 285–0000). Biochemical testing is required for all personnel involved in or contributing to a Class A, B, or C aviation accident.

(4) Performing physical examinations of surviving accident victims (per AR 40–501).

(5) Autopsies on the remains of aircrew members are mandatory (per AR 40–21). In other cases, the Armed Forces Medical Examiner may authorize an autopsy in accordance with AR 40–57. This may be done where the Federal Government has exclusive jurisdictional authority, and where the circumstances surrounding the death are suspicious, unexpected, or unexplained. This includes unnatural or violent deaths resulting from known or suspected accident; that is, deaths specifically resulting from vehicular, aircraft, vessel, or other aviation/ground accidents. Additionally, pursuant to AR 40–400, the Army MTF commander may direct an autopsy when it is considered necessary for the protection of the welfare of the military community to determine the true cause of death or to secure information for the completion of military records. In cases where the accident investigation board concludes that an autopsy is necessary, consistent with the above guidelines, the Commander, USACRC, will consult with the MTF commander nearest to the scene of the accident or where the body is located. In other cases, consent of the next of kin is required in accordance with AR 40–400.

(a) When possible, autopsies should be performed by AFIP.

(b) If AFIP personnel cannot perform an autopsy, it will be performed by personnel in the following order of precedence:

1. Military forensic pathologist.

2. Army pathologist or civilian forensic pathologist.

(c) The individual conducting the autopsy will consult with the Armed Forces Medical Examiner, AFIP, by calling commercial (301) 319–0000, DSN 285–0000.

(6) Assisting in obtaining results of autopsies conducted by civilian authorities.

(7) Conducting detailed external examinations (to include photographs) and full body x–ray examinations. Samples of blood, urine, and other body fluids of deceased accident victims will be obtained for laboratory testing when permission for an autopsy is refused.

(8) Provide admittance and disposition sheets to local safety offices.

b. The Army Provost Marshal Office will support investigations, to include liaison with local law enforcement as required. This support will include providing accident information from DA Form 3946 (Military Police Traffic Accident Report) and daily blotters.

c. All installation organizations (for example, Director of Industrial Operations and Director of Engineering and Housing) will support accident investigations as required.

3–17. Review of accident investigation reports

All accident investigation reports will be processed by each reviewing agency.

a. Initial review. The initial reviewing official will normally be the commander of the unit involved or the commander of the supervisor directly responsible for the operation, material, or persons involved in the accident. This official will review the accident report, provide written concurrence or non–concurrence with the findings/recommendations, ensure that factual data are circulated within the unit, ensure recommendations that can be put into effect at the unit level are implemented, and forward the original through the designated chain of command to the Army Headquarters reviewing authority.

b. Installation–level safety manager review. The installation–level safety manager or their equivalent when an installation safety office does not exist will ensure that the entire accident report is prepared per instructions, and accident data are analyzed for prevention purposes.

c. Army Headquarters reviewing authority. Army Headquarters commanders or their designated representatives will provide written concurrence or non–concurrence for each finding and recommendation made by the accident investigation board. The Army Headquarters safety office will ensure that the accident report is complete and take additional actions when required.

3–18. Reports prepared by U.S. Army Combat Readiness Center

Reports prepared by USACRC will be completed within 90 calendar days and returned through the unit chain of command. The original and one copy of the report will be forwarded to the unit experiencing the accident; another copy will be forwarded directly to the appropriate Army Headquarters. Commanders will review the original report, concur or non-concur in writing, and return the report through channels to the Army Headquarters. The Army Headquarters will ensure the original copy of the report is returned to USACRC within 90 calendar days from the date of the USACRC letter of transmittal.

3–19. Processing accident reports

Prepare 1 original and 2 copies of the appropriate forms and supporting documents. Send ARNG accident reports through ARNG RC, ATTN: NGB–AVN–S, 111 South George Mason Drive, Arlington, VA 22204–1382, to Commander, USACRC.

a. For all on–duty Class A and B accidents, forward the report through channels to the appointing authority's Army Headquarters and mail to Commander, USACRC, ATTN: CSSC–SDA, Fort Rucker, AL 36362–5363.

b. For all other accidents, submit the original or electronic copy of the report to the Commander, USACRC, ATTN: CSSC–SDA, Fort Rucker, AL 36362–5363.

c. Copies will be retained by the appointing authority's Safety Office and any other offices as directed by the Army Headquarters.

3–20. Changes to accident reports and request for extension of submission time limits

a. A change to an accident report will be submitted when:

(1) An event occurs that changes the classification of an accident (for example, from Class C to Class B, or Class B to Class A).

(2) Additional information is discovered that was not known when the initial report was submitted. Changes to reports will not be submitted for changes in number of days lost or property damage estimates, except as indicated in 3–20*a*(1), above.

b. When requesting a downgrade change (that is, Class A to Class B) supporting documentation such as an actual cost of damages/estimated cost of damages is required.

c. Requests for extension beyond the accident report due date will be made telephonically or via e–mail to the

Administrative Quality Control Section, USACRC (commercial (334) 255–2325/255–2347, DSN 558–2325/558–2347), by the Army Headquarters Safety Office.

3–21. Headquarters, Department of the Army accident report evaluation, review, and action

a. The USACRC will review all accident reports for regulatory and technical compliance.

b. The USACRC will evaluate all DOD and DA–level recommendations for entry into the recommendation and tracking system. USACRC will—

(1) Establish and maintain a formal automated system to track actions on DA–level recommendations from accident reports.

(2) Provide written notification to the command, organizations, or agency responsible for implementing or initiating corrective action on DA–level accident recommendations.

c. Army Headquarters, program executive officers (PEOs), and DA Staff agencies and activities will—

(1) Establish and maintain a formal system to track actions taken on DA–level recommendations from accident reports for which they are responsible.

(2) Establish and maintain a formal system to track actions taken on unit level and higher level recommendations from Class A, B, and C accident reports for units, organizations, agencies, or activities under their respective command or control.

d. Upon receipt of written notification of recommendations, the responsible DA–level organization will provide telephonic acknowledgement within 5 working days and an initial response to the USACRC within 60 calendar days as to corrective action initiated or planned. Interim and follow–up reports are required every 90 days after initial response until the action is closed.

e. All DA–level recommendations not accepted or implemented by the responsible command, organization, agency, or activity will be returned to the Commander, USACRC, with support rationale within 60 calendar days after the date on the letter of transmittal.

3–22. Maintaining accident records

All accident report records required by this regulation and maintained by USACRC will be retained at least 10 years. For other organizations, maintain records of accident investigations to include the current fiscal year and the previous 5 fiscal years.

3–23. Deviations

Occasionally, the safety accident reporting requirements of this regulation may be incompatible with mission accomplishment. In such cases, Army Headquarters commanders may request deviation from the specific requirements from HQDA (DACS–SF), Washington, DC 20310–0200.

3–24. Scene preservation

A concerted effort is required by Army Headquarter commanders to ensure that each group of investigators is able to collect the information and evidence required to properly conduct its investigation.

a. When the situation permits preservation of the accident scene, only those actions necessary for rescue or recovery of victims and the initial onsite investigation by MP/CID will be allowed. Whenever possible, photographs of the location of victims should be made before the victims are moved. Access will be restricted to those commanders and personnel directly involved in investigating the accident. Before the arrival of the accident investigation board at the accident site, MP/CID personnel should remove only those items of evidence that would otherwise be destroyed by time or the elements. During the onsite investigation, the safety board will be accompanied by MP/CID personnel who know the nature and location of the evidence removed prior to the board's investigation. Personnel who directed the rescue operations and who can discuss damage to or movement of wreckage that occurred during the rescue operation should also assist the board.

b. When the situation does not permit preservation of the accident scene, MP/CID personnel will remove all items of evidence needed for their investigation. Photographs of items before they are collected will be made whenever possible. All components, wreckage, and debris that must be moved will be stored in a secure area and guarded when necessary until released by the board president. Personnel involved in the recovery operation and knowledgeable of the resulting damage to the wreckage will be available during the accident investigation board's preliminary inspection of the wreckage. The appointing authority will ensure that photos are taken and a sketch of the scene is made with sufficient detail and measurements to allow a scale drawing to be made. All wreckage, damage, and ground markings incident to the accident will be identified and photographed before measurement and cleanup of the accident scene. The sketch and photographs will be provided to the president of the board as soon as possible after his or her arrival.

c. The accident investigation board will be allowed to inspect physical evidence collected by MP/CID personnel. The board president is responsible for ensuring that no member of the board takes any action that would destroy the evidence or would compromise the legal chain of custody of those items.

3–25. Accident scene investigation

Procedures for accident scene investigation are contained in DA Pam 385–40 and the USACRC handbook.

3–26. Access to information from other investigations

The accident investigation board will have access to all evidence, photographs, and witness statements collected by MP/CID investigators. The accident investigation board will also have access to all personnel and medical records of personnel involved in the accident and maintenance records on the equipment involved in the accident. If evidence is forwarded to CID laboratories for analysis, the board president will be provided a copy of the laboratory report. Whenever possible, CID personnel will advise the board president of laboratory determinations, that may be received from the laboratory by telephone. The board president may determine that additional information is necessary for the investigation. When this occurs, the board president will request additional analysis by the laboratory. The results of the additional testing are considered common source factual data available for use by all investigators, unless it clearly reveals board deliberative process.

3–27. Access to information collected by accident investigation boards

a. Other Army authorized investigators will be given access to—

(1) Reports received pursuant to submission of equipment to Army depots for teardown and analysis.

(2) Command directed fitness–for–duty examinations.

(3) Official records on personnel and equipment involved.

(4) Photographs of the accident scene.

(5) Witness lists

(6) Transcripts of relevant portions of intra–cockpit voice recordings.

b. Other investigators will not be given access to—

(1) Witness statements taken by board members.

(2) Preliminary or final board findings and recommendations.

(3) Voice recordings of intra–cockpit communications without authorization of the Initial Denial Authority, Commander, USACRC.

c. For all classes of accidents, where applicable, the accident investigation officer or the president of a board of officers will:

(1) Obtain the name and unit address of the collateral investigation officer or board president.

(2) Provide the collateral investigation officer or board president with all factual material requested.

d. Paragraph 3–27*b* is punitive. Violations of paragraph 3–27*b* are separately punishable as a violation of a lawful general regulation under Article 92, Uniform Code of Military Justice (UCMJ, Art. 92). Penalties for violating this paragraph include the full range of statutory and regulatory sanctions, both criminal and administrative. Violations by Army civilian employees may result in administrative disciplinary actions without regard to otherwise applicable criminal or civil sanctions for violations of related laws.

3–28. Accident information

a. Safety accident investigation reports are official documents. They will be used solely for accident prevention purposes. These reports and their attachments, or copies and extracts, will not be enclosed in any other report or document unless the sole purpose of the other report or document is accident prevention. Common–source documents, photographs, and those documents (other than witness statements) containing purely factual information that are available to other Army authorized investigations are an exception to this rule.

b. Safety accident reports and the privileged documents contained therein, may not be used as evidence or to obtain evidence in any disciplinary, administrative, or legal action such as the following:

(1) Determining or defending the determination of misconduct or line of duty status of Army personnel.

(2) Flight evaluation boards or MOS reclassification actions.

(3) Determining liability in claims for or against the Government.

(4) Determining pecuniary liability.

(5) Any other adverse personnel action.

c. Paragraph 3–28*b* is punitive. Violation of paragraph 3–28*b* are separately punishable as a violation of a lawful general regulation under UCMJ, Art. 92. Penalties for violating this paragraph include the full range of statutory and regulatory sanctions, both criminal and administrative. Violations by Army civilian employees may result in administrative disciplinary actions without regard to otherwise applicable criminal or civil sanctions for violations of related laws.

3–29. Release of information from Safety Accident Investigation Reports

a. All requests under the provisions of the FOIA for information from, or copies of, Class A, B, or C safety accident investigation reports will be referred through command channels to the Commander, USACRC, ATTN: CSSC–ZS, Fort

Rucker, AL 36362–5363. The USACRC is the repository for Class A, B, C, D, E safety accident reports, and Class E and F incident reports. The USACRC Commander has been delegated authority to act as the Initial Denial Authority on requests for information from Army safety accident reports.

b. The Commander, USACRC is designated by the SA to assert the privilege to oppose any court–ordered release of privileged safety information for all investigations.

c. Local safety offices are authorized to release Class D and E general use safety accident reports in their entirety in response to FOIA requests after consulting with their SJA or legal advisor to ensure that complete disclosure would not be in violation of the FOIA. Local offices wanting to withhold portions of a Class D and E general use safety accident report must refer the action to USACRC at the address listed in 3–29*a*, above.

d. Requests received directly from members of Congress or their staffs for access to accident reports will be referred to HQDA, Office of the Chief of Legislative Liaison, 1600 Army Pentagon, Washington, DC 20310–0107. That office will then relay the request to USACRC or the appropriate local safety office in accordance with the guidance in paragraphs *b* and *c*, above.

e. Requests from non–DOD Federal agencies for access to reports are governed by other provisions of this regulation and, in many instances, by interagency agreements or specific regulations. (For example, AR 95–30 governs the release of information to the Federal Aviation Administration.) Command and installation safety offices that receive such requests will contact their local SJA or legal advisor or the USACRC command judge advocate (DSN 558–2924 or commercial (334) 255–2924) for guidance.

f. Subpoenas for the production of accident reports or for the testimony of accident investigators will be referred to the recipient's legal advisor or SJA for action required by AR 27–40 in consultation with the USACRC command judge advocate.

g. Requests for access to accident reports from other staff sections and DOD organizations and commands are governed by the restrictions in this paragraph. The procedures below will be followed in response to these requests.

(1) The requester must state the reason the information is needed and the purpose for which it will be used. If the requester's purpose is not solely for accident prevention and a collateral investigation was conducted, the requester will state the reason the collateral investigation will not satisfy requester's need.

(2) If the requester's sole purpose for requesting the report is accident prevention, the entire report may be released with a warning that further disclosure by the requester is not authorized.

(3) If the requester intends to use the information for any purpose other than accident prevention, only common source data, the names of witnesses, photographs, diagrams, and the results of scientific or technical tests will be disclosed. The following information will not be released:

(a) The report's findings, recommendations, and the investigator's analysis.

(b) The content of witness statements, both confidential and non-confidential, if they were obtained on a promise they would not be used for purposes other than accident prevention.

(c) Medical records unless they meet the requirements of AR 40–66.

h. In addition to OSHA reporting forms, a copy of the nonprivileged portions of safety accident investigation reports in which a Army civilian employee is injured or property is damaged in a Army civilian employee work area may be provided to the exclusive representative of the employee involved and to the appropriate safety and health committee, if requested. This information is provided for purposes of safety/accident prevention only.

i. Paragraph 3–29*g*(3) is punitive. Violations of paragraph 3–29*g*(3) are separately punishable as a violation of a lawful general regulation under UCMJ, Art. 92. Penalties for violating this paragraph include the full range of statutory and regulatory sanctions, both criminal and administrative. Violations by Army civilian employees may result in administrative disciplinary actions without regard to otherwise applicable criminal or civil sanctions for violations of related laws.

3–30. Special reporting requirements

Accident investigation and reporting requirements for marine, chemical agent, explosives, ionizing and non–ionizing radiation, nuclear weapon and reactor accidents, and biological defense mishaps are addressed in DA Pam 385–40.

3–31. Costing

Computations for accident costs will be accomplished in accordance with DA Pam 385–40.

3–32. Injury and accident rates

These rates include recordable injuries, and/or accidents with property damage meeting the reporting criteria. To convert the rates obtained in the following formulas (except aviation) to an annual rate for comparison of any time period, multiply the rate obtained by 12 and then divide by the number of months covered.

a. Injury rates.

(1) *Active Army military injury rate.* The Active Army injury rate is based on the total number of recordable injuries for each 1,000 personnel during a specified period. Injury rates are computed using the following formula: injuries times 1,000, divided by personnel strength.

(2) *U.S. Army Reserve and Army National Guard military injury rates.* The USAR and ARNG injury rates are the total number of recordable injuries for each 1,000 personnel during a specified period. Injury rates are computed using the following procedure:

(a) Prorated strengths are computed by subtracting the Active Guard Reserve (AGR) and mobilized population from the Selected Reserve strength, multiplying the result by 0.1068, and then adding this last result to the AGR and mobilized population.

(b) Multiply the number of injuries over a specified time period by 1,000 and divide by the prorated strength as computed in the paragraph above.

(3) *Army civilian employee injury rate.* The Army civilian employee injury rate is the total number of recordable injuries per 100 civilian personnel during a specific period of time. Rates are computed using the following formula: number of fatalities/lost-time injuries multiplied by 100, divided by the Army civilian strength.

b. Accident rates.

(1) *Army ground accident rate.* This rate is the total number of Army ground accidents for each 1,000 personnel over a specific time period. Rates are computed using the following formulas:

(a) Active Army ground accident rate. Number of accidents multiplied by 1,000 divided by personnel strength.

(b) U.S. Army Reserve and Army National Guard ground accident rate. Number of accidents times 1,000, divided by prorated personnel strength.

(2) *Army aircraft accident rate.* The rates for Army rotary wing and fixed wing, and other types of Army aircraft will be computed on the number of aircraft accidents per 100,000 aircraft flight hours. These rates will include flight accidents only.

c. On–duty and/or off–duty injury and accident rates. These rates are computed by multiplying the on–duty and/or off–duty number of injuries/accidents by 1,000 and dividing by the respective Active Army or prorated USAR/ARNG personnel strengths.

Chapter 4
Contracting Safety

4–1. Introduction

This chapter sets forth Army policy for integrating safety into the contracting process. Safety and occupational health must be a critical consideration in the pre-solicitation phase of each contract awarded to determine safety and occupational health requirements. Safety will be an integral part of the design and construction of military facilities and buildings and for the design, development, production and fielding of Army systems and in services contracts. The capability of a contractor to define and achieve system safety requirements will be evaluated during source selection process when require by the solicitation package.

4–2. Contract requirements

a. Service and supply contracts.

(1) The contracting officer shall insert FAR Clause 52.236–13, Accident Prevention or the clause with its Alternate I in solicitations and contracts when a contract for services to be performed at Government facilities (see 48 CFR 37) is contemplated, and when technical representatives advise that special precautions are appropriate.

(2) Additional contract requirements shall be added when necessary to protect the contractor from adjacent work activities or processes and prevent contractor activities from presenting a hazard to the public or Army personnel, property, or mission execution. Additional guidance for research and development services is in 48 CFR 35; architect–engineering services is in 48 CFR 36; information technology is in 48 CFR 39; and transportation services is in 48 CFR 47.2.

b. Construction contracts. The applicable provisions of the latest version of EM 385–1–1, in effect on the date of the solicitation, is a requirement in all Army contracts for construction or dismantling, demolition or removal of improvements. The FAR provisions for construction and architect–engineer contracts, 48 CFR 36, and the Unified Facilities Guide Specifications (UFGS) shall be consulted, and the applicable clauses and specifications included as follows:

(1) *Major projects.* The contracting officer shall insert FAR Clause 52.236–13 in solicitations and contracts when a fixed–price construction contract or a fixed–price dismantling, demolition, or removal of improvements contract is contemplated and the contract amount is expected to exceed the simplified acquisition threshold ($100,000).

(2) *Other projects.* The contracting officer may insert the clause and specification in solicitations and contracts when a fixed–price construction or a fixed–price contract for dismantling, demolition, or removal of improvements is contemplated and the contract amount is expected to be at or below the simplified acquisition threshold.

(3) *Duration and hazardous nature.* If the contract will involve work of a long duration or hazardous nature, the contracting officer shall use the FAR clause with its Alternate I.

c. Explosives and chemical facilities. The requirements of DOD 4145.26–M apply to the contractors performing work or services on DOD contracts, subcontracts, purchase orders, or other methods for ammunition and explosives.

(1) The design and construction of chemical facilities will be in accordance with DA Pam 385–64 and DA Pam 385–61 and site plans will be submitted in accordance with DA Pam 385–65.

(2) The contractor will be required to identify the site proposed for ammunition, explosives, chemical agent operations through the administrative contracting officer in accordance with their contract for evaluation and approval to ensure compliance with safety and occupational health requirements.

d. Biological RDT&E facilities. Biological RDT&E facilities contracts will require that the facilities be designed, constructed, and acquired in accordance with DA Pam 385–69.

e. Radiographic facilities. Contracts will require radiographic facilities be designed, constructed, and acquired in accordance with DA Pam 385–24.

f. Provisions and clauses. Provisions and clauses prescribed elsewhere in the FAR will be used in relevant solicitations and contracts when the conditions specified in the prescriptions for the provisions and clauses are applicable.

g. Additional requirements and changes. Contractors shall insert the complete FAR clause and any additional contract requirements (for example, UFGS 01525), with appropriate changes in the designation of the parties, in all subcontracts.

4–3. Contractor responsibilities

a. The following responsibilities will be considered for inclusion in the contract:

(1) All contractors are responsible for complying with applicable OSHA standards, DOD, Army, Federal, state, and local safety and health requirements.

(2) A system to identify and correct unsafe conditions and acts related to their contract work.

(3) A system to report unsafe or hazardous conditions caused by elements out of their control (for example, public or Army personnel, adjacent process or work activity, and so forth) to the contracting officer or authorized representative.

(4) A system to report all accidents, injuries and illnesses occurring on the project to the contracting officer in accordance with the contract accident–reporting procedures.

(5) A system to investigate accidents and provide reports.

b. A written site–specific plan for implementing OSHA standards, DOD, Army, Federal, state, and local safety and health requirements to the contracting officer for acceptance. The plan shall include—

(1) An activity hazard analysis of the significant hazards to life, limb, and property inherent in the specific contract work performance and a plan for controlling these hazards.

(2) Designation of the contractor quality control qualified personnel primarily responsible for safety and health at the project site.

(3) A description of how the contractor quality control safety duties will be performed on the project. At a minimum, these duties will consist of—

(a) A pre–work review of appropriate activity hazard analysis, to be reviewed with each worker.

(b) Regular safety training for the workforce.

(c) Frequent and regular checks for compliance with contract safety requirements by contractor and subcontractor workforce.

(d) Daily records providing factual evidence of quality control activities for safety performance and state the following: items/areas checked the results, and any instructions or corrective actions.

c. Specific elements of an audit program by the prime contractor should include onsite inspection of subcontractors, method of determining accident rates, and traceability of hazards.

4–4. Contractor safety brief

a. Prior to beginning on a contract, the contractor shall meet with representatives of the contracting officer and installation safety officer and mission safety office to discuss and develop a mutual understanding about the administration of the overall safety program.

b. The meeting shall be attended by the contracting officer and/or contracting officer's representative and the contractor's authorized representative and should, to the extent possible, include—

(1) Contractor project superintendents.

(2) Supervisors.

(3) Quality control.

(4) Safety.

(5) Subcontractors.

(6) Contracting officer's QA representatives/safety.

(7) Other personnel involved in contractor oversight or interaction.

(8) Outside organizations that may interact with or be affected by the contractor's work such as fire/emergency personnel, security, adjacent facility/process managers, and so forth.

4–5. Safety compliance—Army versus contractor responsibilities

a. The contracting officer is responsible, with input from the Director of Safety for the command/activity, for evaluating and assuring contractor compliance with the occupational safety and health requirements in the contract.

b. Whenever the contracting officer becomes aware of any noncompliance with these requirements or any condition that poses a serious or imminent danger to the health or safety of the public or Government personnel, the contracting officer shall—

(1) Notify the contractor orally.

(2) Follow–up with written confirmation.

(3) Request immediate initiation of corrective action.

c. This notice, when delivered to the contractor or the contractor's representative at the worksite, shall be deemed sufficient notice of the noncompliance and that corrective action is required.

d. After receiving the notice, the contractor shall immediately take corrective action. If the contractor fails or refuses to take prompt corrective action, the contracting officer may issue an order stopping all or part of the work until satisfactory corrective action has been taken. The contractor shall not be entitled to any equitable adjustment of the contract price or extension of the performance schedule on any stop work order issued under this paragraph.

4–6. Consideration of past history

a. Safety as demonstrated during previous contracts may be used, at the discretion of the selecting officials, in the evaluation and selection of a contractor to build, design, construct, develop, field or operate a system, building or facility. This effort has two aspects, design/construction of buildings and facilities and design, development, production and fielding of systems. Historical safety will be evaluated.

b. The contractor in the proposal may also submit evidence of successful safety programs.

c. During system development, historical safety and health data (system safety lessons learned) from other systems will be used in developing new and similar systems and modifications to fielded systems. In addition, information from other disciplines: systems engineering, logistics, product assurance, manufacturing and engineering specialties (for example, propulsion, warheads, fuzing, and so forth) and health hazards will be used as part of implementing the system safety effort and identifying system safety hazards. Historical safety information on predecessor systems and the application of lessons learned are critical to the development of a safe system. The combat developer should begin to collect this information soon after approval of the justification of major system new start or the organization and operations plan.

4–7. Evaluation of safety ability

Each bidder shall be evaluated during the selection process to ensure compliance with the solicitation safety requirements.

4–8. System design, development, and production

System design, development, production/modification and fielding contracts will contain requirements that system safety be considered throughout the life cycle of the system. The PM shall require delivery of the SSPP as part of the contractor proposal. A tailored system safety program will be implemented for all systems, to include NDIs and materiel change management efforts. The contractor system–safety program requirements will be tailored according to the guidance contained in MIL–STD 882D, this regulation and DA Pam 385–16.

a. The contractor will provide updates to the system safety management plan (SSMP) as required. Quality programs contribute to the safety of a system. The PM should ensure contractor integration of those programs into the contractor's system safety program by requiring a quality program plan (DI–R–1710) in the Request for Proposal (RFP) and establishing it as evaluation criteria for the SSPP and for the quality program plan during source selection.

b. The requirement for the SSPP is outlined in the RFP and will be designed to require the contractor to prepare the SSPP and deliver it to the Government as a part of the contractor's proposal. Specifically, this early preparation and delivery of the SSPP is accomplished by the contracting officer inserting the requirement into the "Instructions to Offerors" section of the RFP. This approach is recommended because competition among contractors at this point results in the best possible SSPP and because this document will be available for program evaluation and approval during source selection.

c. The SSMP will be reviewed and updated prior to each milestone decision review (MDR). A safety assessment report will be prepared for each system and updated prior to each MDR. The safety assessment report will contain the Health Hazard Assessment Report (HHAR). The contractor will be required to provide input to each of these reports.

d. Safety criteria must be included in design and equipment specifications. A system–specific system safety working group will be established to track hazards and ensure program coordination for all major and Army Designated Acquisition Program systems. Non–major systems may be grouped by common characteristics under a system safety

working group. The Hazard Tracking System shall be established to provide a total life cycle record of the disposition of all system hazards (see DA Pam 385–10 for guidance on structure and procedures for hazard tracking). The SSRA for all residual hazards being considered for acceptance will be included in all MDR packages and forwarded to the appropriate decision level. Risk management procedures will be used to manage risk for each contract.

e. The contract will provide adequate resources for the implementation and maintenance of an effective system safety effort. The contractor will be required to compile and apply historical safety and health data (system safety lessons learned) early in the acquisition program.

f. The contractor will prepare a safety brief that describes the SSMP/SSPP as required by the contract. The briefing will also identify safety and health hazards and the recommended corrective action to mitigate or eliminate each hazard.

Chapter 5
Explosives Safety Management

5–1. Introduction

a. This chapter provides minimum explosives safety policy for commanders with an ammunition and/or explosives mission to protect personnel.

b. The explosives safety standards prescribed in DA Pam 385–64 will be used together with this chapter.

c. Explosives storage and handling must conform with DOD and Army standards for explosives safety unless the use of other criteria such as those of the North Atlantic Treaty Organization or a HN has been agreed to or are mandatory. A copy of all agreements will be made a permanent part of the real property records.

5–2. Applicability

This chapter applies to activities and organizations with missions involving ammunition and explosives and applies during peacetime, wartime, contingency operations, training, exercises, military munitions responses, and RDT&E (refer to AR 385–63 for guidance specific to live fire training and training ranges).

5–3. Application of mishap risk management component of composite risk management

The requirements shall be applied to the requirements of this chapter and DA Pam 385–64.

5–4. Minimum standards

The requirements of this regulation and DA Pam 385–64 provide the minimum amount of safety. Their application does not eliminate the possibility of severe damage and personnel injury in some applications.

5–5. Standards compliance

Ammunition and explosives safety standards are designed to protect against serious injury, loss of life, and damage to property, but are not intended to be so rigid as to prevent the Army from accomplishing its assigned mission. When deviating from this regulation or DA Pam 385–64, the proper authority must weigh the added risk to personnel and property against the strategic and other compelling reasons that necessitate such deviations.

a. New construction. When building or performing a major modification on a structure (greater than 15 percent of current value) that violates or will violate the provisions of this regulation or DA Pam 385–64, the commander must certify such projects are essential due to operational necessity or other compelling reasons and obtain written authority — a Certificate of Compelling Reason (CCR) from the appropriate level of command.

b. Existing facilities. When an existing facility violates the provisions of this regulation or DA Pam 385–64, waivers, exemptions, and CCRs will be executed and the risk will be accepted at the appropriate level of command.

5–6. Explosives safety site plans

a. New facilities and construction. Site plans are required for construction of new explosives facilities and for the construction of any facility within the explosives arc of an existing explosives facility.

b. Increased level of risk. Site plans are required when the use or remodeling of the facility increases the level of risk associated with the facility. Site plans are not required for remodeling or changes in use when associated risks are similar or less. (See similar risk in the glossary.)

c. Site plan submission.

(1) By 1 October 2011, all site plans will be submitted electronically using software approved by the ODASAF.

(2) The unit responsible for the operation of the explosives site will develop and submit site plans in accordance with DA Pam 385–64 and DA Pam 385–61.

(3) The operating unit will develop and coordinate the site plan with the garrison safety office.

(4) Units developing site plans will forward the site plans through engineering and safety channels in their chain of command.

(a) In situations where the submitting organization lacks the ability to review site plans, they will establish a memorandum of agreement with another organization to provide this support. However, they must approve the reviewed package going forward.

(b) ASCCs may require all operating units in their area of responsibility to submit site plans through them for final coordination and approval.

d. Other Service's acceptance of risk. When the explosives arcs from a proposed Army potential explosive site exposes the equipment or facilities of another Service to risk, that Service's acceptance of risk, must be enclosed in the site plan package. The developing unit's chain-of-command will obtain acceptance of risk from the other Service's equivalent level of command based upon the level of risk involved. The USATCES will accomplish final Army coordination with the other Service's headquarters when the level of risk requires.

(1) The reviewing chain of command will—

(a) Indicate specifically in the letter of transmittal its approval of the proposal, along with changes, modifications, or specific precautionary measures considered necessary.

(b) Submit correspondence and site plans in duplicate to the Director, USATCES.

(2) Notification of DDESB approval on properly prepared and submitted routine plans can be expected within 90 days. The ACOM, ASCC, DRU, and NGB must provide the following information to request priority reviews and approval:

(a) Date reply is required.

(b) Proposed contract award date.

(c) Reason priority action is needed.

e. Explosives facilities built before January 1958. Submission of site plans for explosives facilities built before January, 1958 are not required if the facility is used for the same purpose as originally constructed and the level of hazard associated with the facility's operation has not increased. For example, if the facility was constructed for storage of up to 10,000 pounds of 1.1 explosives and the facility is still used for that purpose, then no site plan is required. If the facility is now used for the storage of 15,000 pounds or used as a surveillance workshop, then a new site plan would be required.

5–7. Explosives licensing policy

a. All explosives facilities will be operated in accordance with the requirements of DODD 6055.9E and DA Pam 385–64 or contracting safety requirements.

b. Facilities that cannot meet ammunition and explosives safety standards will not be licensed unless covered by an approved waiver, exemption, or CCR.

c. Installation and unit commanders will ensure that ammunition and explosives are stored only in licensed locations. Quantities will not exceed the amounts authorized on the license.

d. Explosives licenses shall be developed and formatted in accordance with DA Pam 385–64.

5–8. Explosives safety surveys and consultation

Representatives of DDESB periodically visit Army installations to conduct explosives safety surveys and to provide explosives safety consultation. Local commanders will support and provide assistance to the team. The information requested by the DDESB survey announcement letter will be furnished to the board representative upon arrival.

a. The DDESB provides site survey reports, with findings and recommendations, to Director, USATCES. Correspondence with DDESB addressing deficiencies noted will be routed through appropriate ACOM, ASCC, DRU, and USATCES.

b. The USATCES will identify those findings that affect the entire Army and recommend corrective action to the ODASAF.

c. The USATCES will forward the report to the ACOM, ASCC, or DRU, indicating the findings for which they will report corrective actions or justifications.

d. After receipt of the survey findings, a report to DDESB that includes corrective actions taken or planned in response to DDESB findings will be provided to USATCES for further transmittal to the DDESB within 90 day for a CONUS installation or 120 days for an OCONUS installation.

5–9. Chemical demilitarization operations

Operational restrictions for chemical demilitarization operations including operations in a storage area, which support transportation to a demilitarization facility, will be based on public safety risk considerations rather than on traditional MCE calculations.

Chapter 6
Public, Family, Off–Duty Recreation and Seasonal Safety

6–1. Introduction
Public, Family, and recreational safety programs are an essential part of the Army Safety Program that must continually heighten accident prevention awareness during all on–duty and off–duty recreational programs for Soldiers, Army civilians, and their families. Sports and recreational activities continue to rank high as a major cause of accidental injury.

6–2. Policy
a. As in all aspects of military planning and operations, CRM applies to public and recreational activities. Soldiers and Army civilians must be reminded that injuries and fatalities occurring during off–duty time are detrimental to combat effectiveness; therefore, CRM will be used by Soldiers when planning their off–duty activities. It is highly recommended that Army civilians do the same.

b. The public, Family, recreation, seasonal safety procedures, and guidelines prescribed in DA Pam 385–10 will be used together with this chapter.

6–3. Preparation for leave and temporary duty
a. Procedures will be developed and implemented at all levels of the Army to ensure Soldiers have applied CRM to their leave, pass, TDY, or PCS travel plans, which involve driving out of the local area, as determined by the commander.

(1) Immediate supervisors will require the use of the automated POV risk assessment tool at https://crc.army.mil, prior to leave, pass, TDY, or PCS outside the local area, as determined by the commander.

(2) Immediate supervisors will review their Soldiers planning, consult with them on their plans and work with each Soldier to reduce any unacceptable risk.

b. Procedures will be developed and implemented at all levels of the Army to ensure that Army civilians have applied CRM to their TDY and PCS planning.

(1) Supervisors will require the use of the automated POV risk assessment tool at https://crc.army.mil prior to TDY trips or PCS outside the local area, as determined by the commander.

(2) Supervisors will review their Army civilians' TDY and PCS planning, consult with them on their plans and work with each Army civilian to reduce any unacceptable risk.

6–4. Safety promotion
Promotional programs and procedures will be developed to increase awareness of the specific hazards associated with the change of seasons and celebration of holidays. These programs and procedures will emphasize the application of CRM in planning for Family outings, parties and celebrations, especially addressing the use of alcohol and motor vehicles. Immediate supervisors will conduct safety briefings prior to all holidays and long weekends to emphasize the need for CRM and hazard reduction.

6–5. Use of headphones
The use of headphones or earphones while walking, jogging, skating, and bicycling, including pocket bike, motorcycle or moped on Army installation roads and streets is prohibited.

6–6. Water safety
As part of the Army Safety Program, a strategy will be established to provide safe water operations and water recreational activities. This strategy will be publicized in a manner appropriate to the geographic area and will incorporate the requirements contained in DA Pam 385–10.

6–7. Recreational boating
Installations are to develop, publish, post, and enforce rules and regulations for all boating activities (for example, sailing, canoeing, skiing, personal water craft, fishing, and so forth), addressing boating speed limits, alcohol consumption, right–of–way requirements, approved personal floatation devices, required safety training, accident reporting, and boating operator licensing in accordance with Federal, state, and local laws.

6–8. Installation recreation areas
Standing operating procedures will be developed, posted and enforced to ensure public and military personnel safety at all recreational facilities and areas (that is, camping, hunting, and picnic areas, baseball, multi-recreational sport facilities, equestrian center, automotive shops, arts and craft centers, and so forth). The SOP will include all rules pertaining to the facility, training required, emergency reporting, and any other pertinent information necessary to maintain a safe and healthful environment.

6–9. Public activities on military installations

Use of military installations for public activities introduces a new set of risks that must be identified and either controlled or eliminated.

a. Composite risk management will be used to identify all hazards and risks associated with setting up the event, operation of the event, and clean up following the event.

b. An emergency response plan will be developed to cover medical and other emergencies identified by the CRM process.

6–10. Volunteer safety

Volunteers are valuable assets, which provide beneficial human resources to the installation. Guidelines for volunteers are addressed in DA Pam 385–10.

6–11. Sporting events

a. Installations will ensure development and publishing of Safety Information for all sporting activities offered through the installation facility.

b. Activities will submit safety requirements to installation safety for approval and dissemination for all supported activities.

Chapter 7
Radiation Safety Management

7–1. Introduction

a. This chapter prescribes DA safety policy and processes for the Army radiation safety function. This chapter applies to all sources of radiation, both ionizing and non–ionizing.

b. DA Pam 385–24 contains technical requirements for developing management and control processes for operations involving sources of radiation and its implementation is mandatory.

7–2. Policy

a. Army organizations shall develop management and quality control processes to identify, mitigate, and control hazardous radiation fields and other radiation hazards associated with Army activities and equipment by engineering design, administrative controls, or protective equipment (in that order). Organizations will also ensure that exposure to ionizing radiation is kept as low as reasonably achievable.

b. Radiation sources and radiation producing devices shall comply with all Army, DOD, Federal, and applicable state regulations and requirements.

c. Organizations will adopt no practice and conduct no operation involving planned exposure of personnel to radiation in excess of the applicable exposure standards. This does not preclude the use of Operational Exposure Guidance during deployment.

d. Although a commander or director may assign the radiation safety functions of the RSO or laser safety officer anywhere in their organization (that is, safety office, logistics, The Surgeons General's office, commander's staff, and so forth), the RSO and laser safety officer shall have direct access to the commander or director for radiation safety purposes.

e. Organizations involved in RDT&E, and in acquisition of equipment (including COTS equipment) that emits radiation or contains radioactive material will develop management and quality control processes to—

(1) Identify hazards and controls and incorporate protection measures or identify operational restrictions before fielding.

(2) Process residual risks for acceptance per AR 70–1 before fielding materiel.

(3) Ensure that radiological concerns are addressed in the fielding, training, and life cycle management of commodities containing radioactive material or that produce radiation.

(4) Ensure proponents of technical publications include radiation safety requirements about siting, operation, training, and maintenance of commodities and systems that contain radioactive material or emit radiation.

f. When required to furnish dosimeters to workers, the dosimeters from the ADC will be used. This does not prohibit ASCC commanders from using military standard dosimeters, including electronic dosimeters, for deployment operations, but the readings from these dosimeters cannot be substituted nor be used as official radiation exposures as currently documented by the ADC personnel dosimeters. They can be used during investigation of potential over exposures.

g. Environmental documentation will be developed for radiation sources and radiation producing equipment (see 40 CFR, AR 200–1, and AR 200–2 for environmental requirements).

h. Disposal of radioactive material on Army property is prohibited. However, the garrison commander may authorize radioactive releases to the atmosphere or to the sanitary sewerage system that are in compliance with all applicable Federal, state, local, DOD, and Army regulations.

i. Army overseas controls of radiation sources will be at least as protective as Army domestic controls.

7–3. Applicability

This chapter applies to activities and organizations with a mission involving ionizing and non–ionizing sources and applies during peacetime, wartime, contingency operations, training, exercises, and RDT&E.

7–4. Application of composite risk management

The requirements of appendix B are mandatory and shall be applied to the requirements of this chapter and DA Pam 385–24.

7–5. Radiation safety key components

As part of the Army Safety Program, a radiation safety function will consist of management and control processes addressing all aspects of the following key components as applicable:

a. License, ARA and Army radiation permit management and associated recordkeeping.

b. Personnel monitoring to address—

(1) Bioassay.

(2) External dosimetry.

(3) Records.

c. Personal protective equipment and engineering controls.

d. Handling and disposal of radioactive waste.

e. Equipment calibration.

f. Training.

g. Inventory and accountability.

h. Shipping and receiving.

i. Foreign and captured material.

j. Military operations support.

k. Garrison support of tenants and contractors.

l. Life cycle management.

m. Use and storage—

(1) Posting.

(2) Security.

n. Radiation surveys.

o. Leak testing.

7–6. Army radiation authorization

a. An ARA is required for all Army sources not regulated by Nuclear Regulatory Commission except—

(1) By–product, source, or special material that the Nuclear Regulatory Commission has declared to be license–exempt (10 CFR 30.14 through 10 CFR 30.20, 10 CFR 40.13 through 10 CFR 40.14, and 10 CFR 70.13) or generally licensed (10 CFR 31; 10 CFR 40.20 through 10 CFR 40.28; and 10 CFR 70.19 through 10 CFR 70.20b).

(2) Less than 0.1 microcurie (µCi) (3.7 kilobecquerels (kBq)) of radium.

(3) Less than 1 µCi (37 kBq) of any naturally occurring/accelerator produced radioactive material (NARM) other than radium.

(4) The Nuclear Regulatory Commission's regulations regarding license–exempt concentrations (10 CFR 30.14) and quantities (10 CFR 30.18) will be applied similarly to NARM with respect to ARA exemption upon HQDA approval. Applicants for such exemptions will send supporting documents through command channels to HQDA, ATTN: DACS–SF, Washington, DC 20310–0200.

(5) Electron tubes containing less than 10 µCi (370 kBq) of any NARM radioisotope.

(6) Machine produced ionizing radiation sources not capable of producing a high radiation area or very high radiation area (that is, 100 millirem in 1 hour at 30 centimeters from any surface of the device). For example, medical and dental diagnostic x–ray systems, and some battery powered pulsed x–ray systems do not require an ARA. However, commanders will establish policies and procedures to assure that design and use of these excepted sources comply with applicable radiation safety regulations, guidelines and that only appropriately trained, and authorized personnel operate them.

b. When Nuclear Regulatory Commission generally licensed items are centrally purchased, the CG, AMC will issue an ARA to ensure that the general license requirements are met.

c. The Army Reactor Office (AR 50–7) permits Army nuclear reactors and Army reactor–produced radioactive material that remains at the reactor site.

7–7. Army radiation permits

a. Non-Army agencies (including other military services, vendors, and civilian contractors) require an Army Radiation Permit to use, store, or possess ionizing radiation sources on an Army installation (32 CFR 655.10). (For the purpose of this paragraph, ionizing radiation source means any source that, if held or owned by an Army organization, would require a specific Nuclear Regulatory Commission license or ARA.)

b. Disposal of radioactive material by non-Army agencies on Army property is prohibited. However, the garrison commander may authorize radioactive releases to the atmosphere or to the sanitary sewerage system that are in compliance with all applicable Federal, state, local, DOD, and Army regulations.

Chapter 8
Safety Awards Program

8–1. Introduction

The purpose of this chapter is to establish safety awards for recognizing organizations and individuals for their contributions and enhancements to the Army Safety Program.

8–2. Promotion of safety

Safety awards enhance Army operations and improve safety awareness through recognition and promotion of individual and organizational accident prevention measures and successes.

8–3. Award guidance

Criteria, policies, and procedures for nominating units and individuals for the awards in this chapter are contained in DA Pam 385–10.

8–4. Department of the Army level awards

a. Army Headquarters Safety Award. This plaque is awarded by the SA/CSA to ACOMs, ASCCs, and DRUs that have demonstrated significant improvements, sustained excellence and leadership in accident prevention programs.

b. Army Exceptional Organization Safety Award. This plaque is awarded each fiscal year to the battalion through division and garrison organization with the most effective overall safety program.

c. Army Individual Award of Excellence in Safety. This plaque is awarded each fiscal year to individuals who in each of 4 categories— officer, NCO/enlisted, Army civilian, and contractor make the most significant contribution to accident prevention.

d. Director of Army Safety, Composite Risk Management Award. This plaque is awarded by the ODASAF to organizations or individuals who have made significant contributions to Army readiness through CRM.

e. Sergeant Major of the Army (SMA), Superior Soldier Safety Award Plaque. The SMA awards this plaque to the Soldier who demonstrates "pockets of excellence" or "best practices" in safeguarding Army operations or personnel.

f. United States Army Safety Guardian Award. This award is presented by the ODASAF to individuals who through extraordinary individual action in an emergency situation, prevent an imminently dangerous situation, prevent injury to personnel, or minimize or prevent damage to Army property.

g. Army Aviation Broken Wing Award. This award is presented by the ODASAF to individuals who through outstanding airmanship, minimize or prevent aircraft damage or injury to personnel during emergency situations.

8–5. Army Headquarters and organization–level awards

a. Army Accident Prevention Award of Accomplishment. This award is presented to TOE or TDA detachments; company–size units, battalions, or equivalent; brigades or equivalent; and divisions, installations, or activities that have completed 12 consecutive months, or a major training exercise, or an actual deployment of greater than 120 days without experiencing a class A, B, or C accident.

b. U.S. Army Aircrew Member Safety Award. Commanders present this award to aircrew members with at least 500 flight hours of accident free hours as a crewmember.

c. Other individual and organizational awards. Leaders at all levels will recognize safe performance of individuals and subordinate organizations. Leaders are encouraged to develop awards that are tailored to recognize the accident prevention accomplishments within their sphere of activity, interest or operation. Leaders may use DA Form 1119–1 (Management Control Evaluation Certification Statement) or are authorized to design and use locally produced certificates or trophies.

d. Unit Impact Awards. Commanders are encouraged to develop and issue policies for safety impact awards to

promote safety awareness through on the spot recognition of safety related actions that are above and beyond what is required of an individual or organization.

8–6. Unit safety certification

Unit safety certification is used to identify units, platoon size or larger, that have achieved levels of safety that deserve recognition. When the below criteria have been verified by the commander at the next level, a certificate will be issued by the local safety office recognizing the unit's achievement for the given period of time. To be certified a unit must have completed the following:

a. Appointed in writing a safety officer who has completed the required level of training.

b. Implemented a safety program in accordance with this regulation.

c. Reduced the number of accidents, both on and off the job by 50 percent of previous year.

d. Have in place an accident tracking and reporting system that complies with the requirements of this regulation.

e. Have in place a documented CRM process demonstrating risk assessment and resulting implementation and management of controls.

f. Sustained the above initiatives for a significant and established period of time, such as 1 year, 2 years, and so forth.

8–7. Educational materials

Safety offices at all levels will distribute educational and marketing information on the Army's Safety Awards Program. Safety officers will ensure all members of the organization are aware of this program.

8–8. Promotion of Prevention Awards Program

Commanders at all levels will promote the Prevention Awards Program using all available means. Typical procedures for promoting the Prevention Awards Program are articles in the installation and local newspapers, posting of flyers/posters concerning the program, inclusion of the program in unit training opportunities (sergeant's time, morning roll call, and so forth), and announcements in local electronic media (radio and television).

Chapter 9
System Safety Management

9–1. Intent

This chapter prescribes policies and procedures to ensure hazards in Army systems and facilities are identified, and the risks associated with these hazards are properly managed. It applies to all Army materiel systems, facilities, and equipment, including NDIs and COTS items. It applies during all phases of the life cycle of systems, facilities, and equipment. These concepts apply to all levels of procurement and acquisition programs down to and including the installation level. Medical–related materiel may require more intensive management, including coordination with other Government agencies.

9–2. Policy

a. Army systems and equipment with uncontrolled residual hazards will not be fielded without executing the formal mishap risk management component of the CRM process. Emphasis will be placed on designing out hazards in Army systems and equipment. Training, administrative procedures, and labels will be used only as a last option (see order of precedence in MIL–STD–882D).

b. System safety shall be applied early (for example, after concept decision) and tailored in accordance with MIL–STD–882D for all Army systems and equipment, regardless of the acquisition process utilized (that is, evolutionary acquisition or spiral development), throughout their respective life cycles. Safety lessons learned shall be a key consideration in selecting the best solution during the analysis of alternatives.

c. Army commanders and managers will implement their system safety engineering and management responsibilities consistent with their missions to include accelerated acquisition, technology transitions, or NDI.

d. The materiel developer of a system–of–systems shall have a tailored, overarching system safety program.

e. The host-platform materiel developer shall assume safety responsibility for the total system integration, unless a memorandum of agreement states otherwise.

f. Hazards discovered in fielded systems, facilities, and materiel shall be assessed and communicated in a timely manner. The hazards shall be eliminated, controlled, or accepted through the mishap risk management component of CRM process and the ASAT, as appropriate.

g. An independent safety assessment of Army system safety risks will be provided in all Army System Acquisition Review Council and in-process review packages and will be provided directly to the milestone decision authority by the appropriate safety support for all MDRs and in–process reviews.

h. A SSMP will be developed for the acquisition of all systems to establish Army management objectives and responsibilities for execution of a system safety program for the life cycle of a system beginning at the concept decision. This will be updated and provided at each MDR.

i. Acceptance of Army system and equipment safety risks will be performed at a level of management authority commensurate with the risk.

(1) AR 70–1 establishes the Army's standard system safety risk decision matrix. Should program requirements dictate a different decision authority, an appropriate matrix will be developed by the PM. The recommended matrix will be submitted for approval to the effected level of authority. The risk acceptance hierarchy will be published and updated as required in the appropriate SSMP.

(2) A formal SSRA will be used to document the acceptance of all risks exceeding the criteria for "low" risk. Either a separate SSRA will be developed and processed for each residual hazard or a consolidated SSRA at the system or subsystem level annotating residual hazards will be processed at an appropriate time consistent with the design decision process for that system. It is not desired that processing of SSRAs be deferred until the MDRs.

j. Army commanders and managers will ensure risk reduction through application of controls by:

(1) System design changes that eliminate the hazard that can greatly reduce the probability or severity of a hazard.

(2) Safety devices which can reduce the probability or severity of a hazard.

(3) Training/procedures/cautions/warnings which can only marginally reduce probability of a hazard.

k. Known system hazards associated with GFE, NDI, or COTS will be tracked and researched, to include possible interfaces with other system components.

l. Hazard closeout through application of consensus design standards. Where the operating environment of the Army system is precisely the same as the operating environment for the corresponding commercial system covered by the consensus design standard, hazards can be closed out as "meeting or exceeding consensus design standards." Similarly, hazards associated with GFE need only be considered if the proposed GFE application exceeds the original operating environment or if interfaces are different from which the GFE is designed.

m. When a hazard is identified that has potentially significant impact upon Army training or operations, the PM, in conjunction with the cognizant materiel development agency, will immediately alert the ASAT chairman.

9–3. Objectives

The primary objective of system safety is to maximize operational readiness and mission effectiveness through accident prevention by ensuring:

a. Hazards and associated risks are identified and managed for each system throughout its life cycle and all mission variations.

b. Hazards are eliminated through design or controlled to acceptable levels and risk associated with residual hazards is formally identified, accepted by the appropriate management decision level, and documented.

c. Hazards associated with new technology or operations are identified for consideration in later applications.

9–4. System Safety Standards

The system safety standards prescribed in DA Pam 385–16 are mandatory and shall be used together with the requirements of this regulation.

9–5. Application of mishap risk management component of composite risk management

The requirements in DA Pam 385–30 are mandatory and shall be applied to the requirements of this chapter and DA Pam 385–16.

9–6. System safety and Manpower and Personnel Integration Program

System safety and health hazards will be integrated into the Army's MANPRINT program, which focuses on the integration of human considerations into the system acquisition process to enhance Soldier system design, reduce life cycle ownership costs, and optimize total system performance.

9–7. Commercial off–the–shelf, non–developmental items, local purchases

a. Commercial off–the–shelf, NDI, and local purchases can pose potential problems concerning operational support and maintenance. These problems result from the fact that the item was built to commercial standards. As a result, the product may introduce hazards in the military environment. The purchaser must compare the commercial application with the tactical battlefield environment.

b. Prior to purchasing, consider the following:

(1) Has the system been designed and built to meet applicable/any safety standards?

(2) Have hazard analysis been performed?

(3) What is the accident history for the system?

(4) Are any protective equipment or actions needed during operation, maintenance, storage, or transport of the system?

(5) Does the system contain or use any HAZMAT (including radioactive substances), have potentially hazardous emissions (for example, laser), or generate hazardous waste/materials?

(6) Are special licenses or certificates required to own, store or use the system?

(7) Is the system similar to previous military systems? Is there a history of accidents involving a similar system?

(8) Is the purchase attempting to resolve problems with previous equipment? Does it create new hazards?

(9) Will it interfere with the operation or use of other military equipment?

(10) Are there any interoperability/connectivity issues that cause safety hazards with the equipment?

c. The AMC and the ATEC are resources to contact for assistance in determining if there are potential interoperability/connectivity issues with locally purchased equipment.

9–8. Integration of system safety program requirements into acquisition programs

Army acquisitions executives, PEOs, and PMs will integrate system safety elements, tailored to meet the complexity of system and milestones of their systems, into their acquisition programs as part of the overall system acquisition strategy. This will be accomplished by developing a SSMP for all systems (or for a family of systems), which will address the following requirements, milestones, and actions. The SSMP will contain provisions for—

a. Establishing Army management objectives and responsibilities for execution of the system safety program.

b. Defining system–specific methods for determining severity and probability.

c. Describing the safety resources for the program.

d. Chartering the system safety working group composed of representatives from users, developers, testers, DA, and other stakeholders, which will be maintained throughout the system life cycle.

e. Establishing a hazard tracking system to provide a total life cycle record of hazards associated with the system.

f. Defining a SSRA process to formally document the acceptance of all risks as specified in the SSMP.

g. Giving a safety assessment report and health hazard assessment and obtaining a mandatory safety release from DTC, when conducting tests, pre–test training, materiel field use, materiel field training, and demonstrations involving Soldiers.

h. Obtaining a safety confirmation from DTC for milestone decisions and materiel release/fielding.

i. Documenting milestones and preparing a programmatic environmental, safety and health evaluation or safety and health data sheet in support of the MDRs.

j. Providing safety support for fielded items, safety evaluation of system modifications, and reprocurements to make certain hazards are not introduced into the system.

k. Providing notification to users of system hazards and countermeasures via the GSNS and safety of flight message system for hazards identified in fielded system. This provision does not apply to ammunition and explosives that are covered by AR 75–1.

9–9. Facilities system safety

a. Army facilities with uncontrolled residual hazards will not be used without executing the formal mishap risk management component of CRM process. Emphasis will be placed on engineering out hazards in Army facilities. Training, administrative procedures, and labels will be used as a last option (see order of precedence in MIL–STD–882).

b. Army commanders, managers, and Centers of Standardization shall establish, maintain, and use FASS engineering, management and health analysis procedures for the design, construction, operation, and disposition of military and civil works facilities, ensuring a coordinated effort between all involved components.

c. Army commanders, managers, and Centers of Standardization shall designate trained FASS points of contacts to develop preliminary hazard information and analysis in the early stages of facility concept, for incorporation into the requirements/funding documents (DD Form 1391 (FY__, Military Construction Project Data), task orders, scope of work, and so forth,) in accordance with DA Pam 385–16.

d. Funding shall be provided to conduct the relevant FASS effort throughout the life cycle of each facility.

e. Acceptance of Army facility and equipment safety risks will be performed at a level of management authority commensurate with the risk. A formal FASS risk assessment will be used to document the acceptance of all risks exceeding the criteria for "low" risk. A separate FASS risk assessment will be developed and processed for each residual hazard. The FASS risk assessments will not be delayed until the MDRs.

f. During the architect/engineer selection process, potential contractors shall be evaluated for qualifications and experience with contractual FASS requirements.

g. Design and facility use changes shall be evaluated for increased risks in accordance with DA Pam 385–16.

h. Facility users shall report any accident, deficiencies, malfunctions, failures, or other situations related to facility design hazards.

i. A hazard tracking system to provide a total life cycle record of hazards associated with the facility and equipment shall be maintained.

j. A FASS lessons learned database shall be maintained.

9–10. Objectives

The primary objective of FASS is to maximize operational readiness and mission effectiveness through accident prevention by ensuring—

a. A FASS effort is established and documented during the life cycle of a facility.

b. A coordinated FASS effort from involved components is achieved.

c. Hazards and associated risks are identified and managed for facilities and equipment.

d. Hazards are eliminated by engineering out or controlled to acceptable levels and that risk associated with residual hazards is formally identified, accepted by the appropriate management level, and documented.

e. Hazards are tracked through the facility life cycle.

f. The FASS lessons learned are captured and shared.

9–11. Facility systems safety standards

The FASS standards prescribed in DA Pam 385–16 will be used together with this regulation.

9–12. Training requirements

Facility/project managers, safety professionals, and FASS points of contacts shall be trained in accordance with DA Pam 385–16.

Chapter 10
Training Requirements

10–1. Introduction

This chapter establishes the training requirements for safety support during Army operations and is intended to reduce losses of manpower and equipment, thus conserving combat power.

10–2. Required safety training

All Army personnel will be provided CRM training in those areas needed for a safe and efficient execution of their task. This training shall specifically address—

a. The PPE required.

b. General safety requirements particular to the operation.

c. Risk mitigation techniques and controls.

d. Special safety requirements.

e. Lessons learned from previous operations.

f. Procedures for reporting and responding to accidents.

g. Identification of all known and perceived hazards.

10–3. Risk management in training

a. Leaders and managers are responsible for integrating CRM into all Army processes and operations. Safety and occupational health staffs will provide mishap risk management component of CRM training, tools and other related assistance. Risk reduction through application of controls by training, procedures, cautions, and warnings help reduce accident probability.

b. Installations are to ensure that the CRM process is incorporated into training plans.

10–4. Safety and occupational health training

All Active Army, ARNG, USAR, and Army civilian employees will be provided the training and education necessary to achieve the skills listed in this paragraph. This training, as a minimum, will be in accordance with 29 CFR 1960.

a. Each agency shall provide occupational safety and health training for safety and health specialists through courses, laboratory experiences, field study, and other formal learning experiences to prepare them to perform the necessary technical monitoring, consulting, testing, inspecting, designing, and other tasks related to program development and implementation, as well as hazard recognition, evaluation and control, equipment and facility design, standards, analysis of accident, injury, and illness data, and other related tasks.

b. Each agency shall provide appropriate safety and health training for employees including specialized job safety and health training appropriate to the work performed by the employee, for example: clerical; printing; welding; crane operation; chemical analysis, and computer operations. Such training also shall inform employees of the agency's occupational safety and health program, with emphasis on the employees' rights and responsibilities.

10–5. Leadership training

Army leaders, commanders, directors, managers and supervisors will be provided specialized training to enable them to execute their safety and occupational health and CRM leadership responsibilities properly.

10–6. Commanders

a. Commanders are required to complete the Command Safety Course (CSC). The CSC provides commanders the tools to manage their unit safety programs effectively and to incorporate CRM into all unit planning and activities. It leverages multimedia, web-based distance learning technology, and, as such, is accessible and easily retained for everyday use. The CSC is accessible through the Combat Readiness University online.

b. Company grade officers must complete the CSC prior to assuming command. Brigade commanders, or first 0–6 in the chain of command, will certify that their officers have successfully completed the CSC prior to assignment as company commanders. Brigade and battalion level command designees must complete the CSC prior to attending the Fort Leavenworth pre–command course. The USACRC is the course proponent for the CSC. A copy of training will be retained in the training file.

c. Additional training is available for supervisors (The Supervisor's Safety Course) and managers (The Manager's Safety Course) at the Combat Readiness University (https://safetylms.army.mil/user/mycourse.asp).

10–7. Career program 12 careerist

a. Activity career program managers. The senior CP–12 careerist at the installation or major subordinate command level will serve as the activity career program manager.

(1) The activity career program manager provides advice, guidance, and support to local careerists and to MCPM.

(2) Career program 12 careerists must complete training in accordance with the ACTEDS.

(3) The CP–12 careerists must remain abreast of current developments in dynamic safety and occupational health as well as the Army philosophy and vision to achieve world-class performance.

b. Supervisors. Supervisors are responsible for coaching and counseling their employees on individual career development.

(1) This counseling includes assisting employees in establishing realistic career goals, assessing employees' shortfalls in training and experience, and identifying training and development needs and opportunities.

(2) Supervisors should utilize DA Pam 690–43, A Supervisor's Guide to Career Development and Counseling for Career Program Employees, and request assistance from activity career program managers in this endeavor.

c. Individual careerists. Each individual is responsible for his or her own career planning and personal development. Paramount to success is the establishment of individual career goals, ascertaining what training and development is needed to achieve those goals, then actively seeking out and pursuing the training and development required. In addition, individuals are strongly encouraged to obtain as much education as possible, to include advanced degrees and professional certification.

10–8. Additional duty safety personnel

a. Additional duty safety personnel are required to complete an online ADSC. The course focuses on additional duty safety personnel from company through brigade level. The ADSC course establishes the Army standard for trained and qualified additional duty safety personnel. Course completion will also satisfy the requirements for completing a local unit safety officer course. The course will require approximately 16 hours to complete.

b. Local safety offices should provide supplemental, installation specific training for ADSOs where needed.

c. Additional duty safety personnel on active duty are required to complete the ADSC within 30 days of appointment. Non–active duty guard and reserve personnel are afforded 90 days to complete the course. The new ADSC is hosted on the USACRC learning management system. The USACRC course certificates and resource CDs are provided to users upon successful completion of the course.

10–9. Educational material

Safety education and promotional materials such as posters, films, technical publications, pamphlets, incentive items, and related materials are proven cost-effective safety awareness tools and therefore will be budgeted for and used at all levels of the Army to promote safety. The USACRC will provide educational material upon request.

10–10. Specialized training requirements

The DASAF is the proponent of specialized safety training in accordance with AR 600–3. Various functions within the Army Safety Program require specialized training. DA Pam 385–10 will include a list of the requirements as well as the ACTEDS plan.

a. Radiation training. The training and experience of the RSO and the alternate RSO must be commensurate with the radiation program for which they will be responsible with formal radiation training completed before assuming duties. The dynamic aspects of the radiation protection program require that each garrison RSO be provided radiation

protection training annually to ensure that he or she is adequately trained. Annual training will be scheduled and funded by the commander in accordance with DA Pam 385–24.

b. Explosives safety. Workers involved with explosives and ammunition will be provided training in accordance with the requirements of DA Pam 385–64.

c. Chemical agent workers. Workers involved with chemical agent operations will be provided training in accordance with the requirements of DA Pam 385–61.

d. Biological workers. Biological workers will be provided training in accordance with the requirements of DA Pam 385–69.

10–11. U.S. Army Combat Readiness Center

a. The USACRC provides extensive safety training and a complete list of their available courses is located at https://crc.army.mil/home/. Safety and Occupational Health Intern Training as well as Aviation Safety Officer Training are conducted at the USACRC. Another source of safety training available to commanders is the USACRC mobile training team. The team will come to the unit's location and conduct a 5–day or 3–day Army Safety and Composite Risk Management Training.

b. Additional training is available for supervisors, managers, collateral duty safety officers, and employees at the Combat Readiness University. The courses are— The Collateral Duty Safety Officer Course, The Employee's Safety Course, The Manager's Safety Course, The Safety Committee Member's Safety Course, and The Supervisor's Safety Course.

Chapter 11
Motor Vehicle Accident Prevention

11–1. Introduction

a. This chapter establishes requirements for traffic safety and loss prevention to reduce the risk of death or injury to Army personnel from POV, AMV, and ACV accidents. It also establishes requirements for motor vehicle accident prevention on Army installations and supplements public traffic safety law.

b. This chapter applies to all active duty Army military personnel at any time, on or off a DOD installation; to Army National Guard (ARNG) and USAR personnel while in a military duty status; to all Army civilian personnel in a duty status, on or off a DOD installation; to all personnel (including contractor personnel) in a DOD owned motor vehicle; and to all persons (including contractor personnel) at any time on an Army installation.

11–2. Motor vehicle accident prevention policy

To facilitate accident prevention efforts, Army personnel listed below will accomplish the listed tasks—

a. Commanders and directors at all levels—

(1) Brief all fatal and other Class A vehicle–related accidents (Soldiers on–duty or off–duty, and on–duty Army civilians, contractor reported, and visitors to Army installations) to the first general officer in the chain of command.

(2) Ensure Army vehicle maintenance and required before, during, and after operation checks are carried out according to Army regulations, technical manuals (TMs), and operator's manuals.

(3) Collect, analyze, and evaluate motor vehicle operator behavior and accident data to identify where accident prevention efforts must be focused.

(4) Ensure that AMV operators are selected, trained, tested, and licensed in accordance with Army regulations.

(5) Ensure AMV driver candidates meet state or HN driver licensing requirements.

(6) Ensure senior occupants are familiar with their authority and responsibilities according to paragraph *c*, below.

(7) Provide training, education, and motivation programs to prevent motor vehicle accidents. These programs will encompass the on–duty and off–duty operation of motor vehicles and recreational vehicles.

(8) Develop procedures to respond to traffic accidents, to include first aid, evacuation of injured, and the safe removal of disabled vehicles.

(9) Ensure formal recognition of vehicle operators and organizations with outstanding safe driving records.

(10) Ensure personnel riding in vehicles requiring personnel to be exposed, are trained in rollover and other emergency procedures.

b. Supervisors of Army motor vehicle and Army combat vehicle operations.

(1) Enforce standards of performance to ensure safety and consistency of Army Soldiers' vehicle operations.

(2) Ensure an assistant driver is assigned when required by paragraph 11–4*c*.

(3) Verify that Army vehicle drivers meet rest, duty time, and the alcohol restriction requirements.

(4) Supervisors will verify whether Soldiers are taking prescription or non–prescription medication that may impair driving or alertness.

(5) Assess driver performance periodically and use incentives to reward drivers with good driving records.

(6) Incorporate the principles of mishap risk management component of CRM process into all motor vehicle–related duties and responsibilities.

(7) Report hazardous operating conditions of Army vehicles to vehicle dispatcher.

(8) Ensure that personnel operating or riding in tactical or combat vehicles have trained and rehearsed crew evacuation or rollover and fire drills.

c. Senior occupant. The senior occupant is the senior ranking individual present or in the case of a combat vehicle, the vehicle commander (VC), is responsible for the overall safety of the occupants. The senior occupant/VC will—

(1) Ensure the requirements of this regulation and AR 600–55 are met.

(2) Ensure the vehicle is operated in a safe manner and in accordance with applicable AMV standards and traffic safety laws.

(3) Ensure that the driver is licensed on the vehicle to be operated.

(4) Prevent drivers who appear fatigued or who are physically, emotionally, or mentally impaired from operating a vehicle.

(5) Ensure that drivers obey headphone and listening devices, operator distraction, and alcohol consumption restrictions.

(6) Ensure vehicle occupants use occupant restraint devices at all times. If the senior occupant cannot be ascertained, the driver shall be responsible for enforcement.

(7) Ensure the authorized seating capacity of the vehicle is not exceeded.

(8) Assist the driver in identifying unsafe mechanical conditions of the vehicle.

(9) Report hazardous operating conditions of vehicles in accordance with organization maintenance SOPs.

(10) Identify road and/or other driving hazards.

d. Motor vehicle operators will—

(1) Operate vehicles in a safe and prudent manner. This includes complying with local speed limits, vehicle speed limits, operating limits, municipal and state laws, SOFAs, and military vehicle regulations.

(2) Report use of prescription or non-prescription medication that could reasonably impair driving or alertness to immediate supervisor.

(3) Report hazardous operating conditions of vehicles to vehicle dispatcher.

(4) After seeking emergency aid, report accidents immediately to their supervisor and to the vehicle dispatcher.

(5) Ensure cargo is properly loaded and secured prior to and during transport.

(6) Wear installed restraint systems and enforce the requirement for passengers to wear occupant restraint devices at all times. Personnel involved in emergency medical care are exempt from the restraint use requirement.

(7) Ensure vehicles and their contents are properly secured when left unattended, to include setting the emergency brake and adequately blocking and chocking the wheels.

(8) Safely ensure highway-warning devices are properly displayed when the vehicle stops on or beside the traveled portion of the roadway.

(9) Post personnel and warning triangles to warn approaching traffic when the vehicle is disabled or halted in a location that obstructs traffic.

(10) Use ground guides in accordance with the provisions of this regulation, FM 21–60, and FM 21–305.

(11) Ensure that personnel riding in tactical or combat vehicles have been trained and have rehearsed crew evacuation or rollover and fire drills.

(12) Soldiers will report to the commander, any traffic violations received from traffic authorities, on or off post.

11–3. Motor vehicle safety standards

a. General Army motor vehicle safety standards.

(1) Army motor vehicles will be maintained in a safe and serviceable condition in accordance with AR 750–1, DA Pam 750–8, TM 38–600, appropriate maintenance manuals and vehicle TMs, and this regulation.

(2) Before, during, and after vehicle operation, commanders or their representatives will ensure that drivers perform the appropriate safety checks, in addition to required preventive maintenance checks and services, to correct or prevent the following conditions:

(a) Improper functioning of steering, lights, windshield wipers, horn, warning signals, side or rearview mirrors, occupant restraint devices, and other safety devices. The driver and all passengers will use restraint systems. Personnel performing emergency medical care are exempt from the restraint use requirement.

(b) Improper condition of windshield, windows, mirrors, lights, reflectors, or other safety devices that are broken, cracked, discolored, or covered with frost, ice, snow, dirt, mud, or grime. Glass will not have posters, placards, stickers, or nontransparent materials that impair operator vision or create a hazard.

(c) Defective, inoperable, or out–of–adjustment service or parking brakes. (When moving vehicles with inoperative service brakes, tow the vehicle using the appropriate recovery vehicle or towbar.)

(d) Fluid leaks. Service leaks in accordance with equipment TMs.

(e) Tires that are excessively worn, deeply cut, or have exposed cords (see TM 9–2610–200–14).

(f) Any condition likely to cause injury to personnel or failure of a component. Examples are cracked wheel hubs, worn or frayed tiedown straps, torn sheet metal with exposed sharp edges, damaged or missing exhaust pipe shields, and leaks from exhaust systems.

(g) Improperly secured loads.

(h) Vehicle loaded beyond design load limits.

(i) Unsafe transport of personnel.

(3) Operators are responsible for bringing any vehicle deficiency to the supervisor's attention. Fault status instructions of DA Pam 750–8 will be followed to ensure that no "status symbol X" faults are changed to "circle X status" (that is, allowing for one time operation or mission) if it will endanger the operator/crew and/or cause further damage to the equipment.

(4) Operators will ensure that all required safety equipment is present, current, and functional, in accordance with the standards outlined in the appropriate operators manual.

(5) Supervisors will report defects in accordance with the provisions established in DA Pam 750–8. Suspected design or manufacturer safety defects will be fully documented and conspicuously annotated with the phrase "DEFECT WHICH MAY AFFECT SAFETY," as described in AR 58–1.

b. Technical Army motor vehicle safety standards.

(1) Commercial type passenger carrying AMVs, as defined in AR 58–1, which are purchased, leased or rented by the Army for use in the United States and U.S. territories and possessions, shall meet all applicable requirements of 49 CFR 571.

(2) Non–developmental item vehicles built to Government–modified manufacturers' specifications will also meet applicable requirements of the Federal Motor Vehicle Safety Standards unless a written waiver is obtained from the U.S. Army Tank–Automotive and Armaments Command (TACOM), which has been designated by the DCS, G–4 as the lead agent for wholesale logistics management.

(3) Foreign-built commercial vehicles purchased, leased, or rented for use OCONUS and United States territories and possessions will meet all applicable safety requirements of the country in which they are registered or assigned. Prior to procuring foreign built commercial vehicles, commanders of OCONUS major Army commands will review the motor vehicle safety standards for acceptability. The review will include all standards applicable to the make, model, and year of manufacture for each type vehicle to be procured. Vehicles intended for export to the United States must comply with United States safety import standards.

(4) Tactical and combat vehicles, designed to contract specifications, may be exempt from Federal Motor Vehicle Safety Standards if such compliance would unacceptably degrade essential military characteristics. Commanders responsible for establishing design characteristics will follow MIL–STD 1180B(1). Copies may be obtained from TACOM.

(5) All AMVs other than tactical and combat vehicles shall be designed to be equipped with restraint systems unless a waiver is obtained from TACOM.

(6) Army motor vehicles will be provided with rollover protection or vehicle roof structure crush protection that conforms to 49 CFR 571.216 and 56 FR 15510 unless a waiver is obtained from TACOM.

(7) Tactical and combat designed wheeled vehicles undergoing developmental testing will be provided with appropriate restraint system/rollover protective structures for protecting test participants.

c. Periodic motor vehicle inspection requirement (HSPG Number 1). All DOD vehicles, including nonappropriated fund vehicles and Government–owned and contractor–operated vehicles, shall be required to pass a safety inspection at least annually. This inspection is described in AR 58–1 and DODI 6055.4 and is in addition to the dispatch inspections.

(1) The inspection will evaluate systems and components for vehicle performance, such as occupant restraint devices, lighting, glazing, exhaust system, wipers, horn, brake systems, steering systems, suspension, tires, and wheel assemblies.

(2) The inspection will ensure that exhaust emissions do not exceed any applicable Federal, state, municipal, or HN requirements.

11–4. Safe motor vehicle operations

a. Occupant protection (HSPG Number 20).

(1) Occupant protective devices will be worn by all persons in or on an Army–owned motor vehicle on or off the installation.

(2) All personnel, to include Family members, guests, and visitors, will wear occupant protective devices at any time on an Army installation.

(3) Occupant protective devices will be worn by all Soldiers driving or riding in a POV whether on or off the installation.

(4) Individuals will not ride in seats from which manufacturer–installed occupant restraints, including airbags, have been removed or rendered inoperative.

(5) Child safety seats shall be used on all Army installations. Installation traffic safety programs shall be consistent with state or local child safety seat laws and with AR 190–5. If there is no applicable local requirement, the installation traffic safety program shall specify age, weight, seating placement, or other criteria for child safety seat use.

(6) The vehicle operator is responsible for informing passengers of the occupant protective device requirement and the senior occupant is responsible for ensuring enforcement. If the senior occupant cannot be ascertained, the driver is responsible for ensuring enforcement.

(7) Failure to wear PPE or comply with licensing or operator training requirements may be considered in making line of duty determinations if the injury is contributed to by the non–use of PPE or noncompliance with requirements.

(8) Soldiers will complete a Travel Risk Planning System, POV risk assessment when going on leave, pass, or TDY out of the immediate local area and will be operating a motor vehicle. The definition of "local area" will be determined by the commander. The risk assessment tool is accessed through the USACRC Web site at https://crc.army.mil.

(9) In the event the online risk assessment tool is not available, supervisors may substitute the online tool with the individual risk assessment found in the POV risk management toolbox on the USACRC Web site.

(10) When access to the internet is not available, supervisors will ensure the Soldier is provided with assistance in completing a DA Form 7566 (Composite Risk Management Worksheet), and ensure the form is signed by the appropriate authority.

b. Driver fatigue management. To reduce the potential for traffic accidents caused by operator fatigue, commanders will establish and enforce specific rest and duty hour limits for AMV operators.

(1) Operators will be provided with at least 8 consecutive hours of rest during any 24–hour period.

(2) An operator will not drive more than 10 hours in a duty period (including rest and meal breaks).

c. Assistant driver scheduling guidance.

(1) If more than 10 hours are needed to complete operations, commanders will assign to each vehicle an assistant driver who is qualified to operate the vehicle.

(2) Assistant drivers for other operations will at a minimum, be familiar with the vehicle operations and trained for ground guide duties. Other operations that require assistant drivers include:

(a) More than 4 hours of the mission are expected to be during darkness.

(b) The need to wear mission-oriented protective posture (MOPP) equipment is anticipated.

(c) Night vision goggles (NVG) will be worn during the mission.

(d) Travel over unfamiliar terrain will require detailed en route navigation.

(e) Use of a ground guide is anticipated and required.

(f) Deteriorating weather or road conditions are expected.

(g) High-value or mission-critical weapons systems or equipment is being transported.

(h) Other unusually difficult mission conditions are expected.

d. Use of headphones, earphones, and listening devices.

(1) The wearing of any portable headphones, earphones, or other listening devices (except for hands free cellular phones) while operating a motor vehicle is prohibited.

(2) Motorcycle operators may wear motorcycle helmets equipped with operator-passenger intercom systems.

e. Cellular phone use. Vehicle operators on DOD installations and operators of Government–owned vehicles shall not use cellular phones unless the vehicle is safely parked or unless they are using a hands free device. The only exceptions to this prohibition are emergency responders, such as MP, ambulance, fire emergency, EOD, and HAZMAT responders.

f. Operator Alcohol Consumption (HSPG Number 8). Vehicle operators will not operate a vehicle for 8 hours after consuming intoxicating beverages, or longer if residual effects remain.

g. Safety equipment.

(1) Eye protection (ANSI Safety Code Z87.1 approved safety goggles or spectacles with side shields) will be worn by VCs, drivers, and assistant drivers of combat or tactical vehicles, when exposed to hazards outside the vehicle, except when protected by a windshield.

(2) Head protection (combat vehicle crewman (CVC) approved ballistic helmet or flight helmet as appropriate) will be worn by all personnel operating or riding as a passenger in Army tactical vehicles in the field.

(3) All trailers will be equipped with safety chains or similar devices, properly connected to the prime mover, to prevent breakaway trailer accidents.

(4) Trailer brake lights, taillights, and turn signals will be in operating condition.

(5) Army motor vehicles, except non–tactical vehicles, will be equipped with properly sized chock blocks for use when parked on sloping terrain, while maintenance is being performed, or when a vehicle is parked and a trailer is attached.

(6) All AMVs operating over public roads will be equipped with highway warning triangles. Vehicles carrying flammable or explosive materials will not use or carry flares.

(7) Emergency, repair, and utility servicing vehicles, truck tractors designed to haul oversized slow-moving loads, truck wreckers, and other vehicles that frequently deviate from or obstruct normal traffic patterns will be equipped with rotating or flashing warning signal lamps. Lights will be red and white for ambulance and firefighting vehicles, blue, or red and blue for law enforcement vehicles, and amber for all others. These devices will be used by emergency response vehicles only when responding to emergency calls, when required to warn traffic of emergency vehicles stopped at the scene of an accident or breakdown, or when military vehicles are used in the pursuit of offenders.

(8) Rotating or flashing amber lights will be used for cranes (wreckers), oversize or overweight vehicles, snow-removal equipment, and other highway maintenance vehicles.

(a) These lights will not be used when their operation is a hazard to other traffic.

(b) Rotating lights or beacons must be mounted so as not to be a hazard or nuisance to the operator or to other vehicle operators.

(9) Convoy signs, as well as rotating or flashing amber warning lights, will be used for the first and last vehicle in a convoy. (Host nation agreements may require additional vehicles in convoy to use these lights.)

h. Use of ground guides. Ground guides are required when wheeled and tracked vehicles are backed, or when moved within an assembly area or motor pool.

(1) Ground guides will be properly trained in accordance with FM 21–60, FM 21–305, and TC 21–306.

(2) For information regarding rail–vehicle transportation, refer to MTMCTEA Pam 55–19, available from SDDC.

(3) Engineer vehicles operating outside of supervised or controlled access construction sites will use the ground guide standards for tactical or combat-wheeled vehicles. Operators of graders, bulldozers, and other engineer vehicles will walk around the vehicle before starting the engine, to ensure the area is clear of obstructions.

(4) When backing or maneuvering in controlled access construction sites, a signal person shall be provided when the point of operation (includes area of load travel and area immediately surrounding the load placement) is not in full view of the vehicle, machine, or equipment operator, when vehicles are backed more than 100 feet, when terrain is hazardous, or when two or more vehicles are backing in the same area.

(5) When operating a vehicle, machine, or equipment within a controlled access construction site and the point of operation is in full view, the operator may back without the assistance of a signal person or spotter provided:

(a) The operator walks behind the vehicle, machine, or equipment to view the area for possible hazards.

(b) A reverse signal alarm is activated, which is audible above the surrounding noise level in accordance with 29 CFR 1926.602.

i. Vehicles equipped with radio antennas.

(1) Operators of vehicles equipped with radio antennas should be familiar with the fire and electrocution hazards associated with antennas contacting overhead power lines.

(2) Antennas will be clipped under the antenna-retaining clip when vehicles are operated in areas that may have overhead power lines.

(3) Vehicle operators should not stop their vehicle under power lines. This could increase the risk of an electrical shock if the antenna tiedown fails.

(4) When antennas on tracked and wheeled vehicles are secured, they will be tied down to a height of between 8 feet and 13 feet. The ends of the antennas will be blunted with an antenna tip assembly, antenna ball, and tiedown kit.

(5) Antennas will be removed and stored inside the vehicle before loading onto the rail car.

j. Fire prevention.

(1) Army motor vehicles will not be operated unless they are entirely free of gasoline, JP 8, or Class III diesel leaks.

(2) Smoking is prohibited within 50 feet of vehicles loaded with flammable or combustible liquids, flammable gases, or explosives and in the presence of flammable vapors such as those present when fueling vehicles or examining or repairing vehicle engines or fuel systems.

(3) During fueling, drivers will turn off engine, put transmission in low gear or park position if automatic, and use parking brakes. When low temperatures prevent setting the parking brakes, wheels will be chocked. For refuel–on–the–move operations, follow safety precautions provided in FM 10–67–1.

(4) The use of cellular phones is prohibited during fueling operations or when flammable vapors are present.

(5) Fuel cans must be offloaded from the vehicle and placed on the ground for filling to avoid static electricity buildup or discharge.

(6) Fire extinguishers will be provided for off–road Army vehicles per applicable TM or technical bulletin.

(7) Fire extinguishers will be mounted in vehicles responding to calls for assistance (such as fire, police, and security protection) and vehicles carrying valuable equipment or materials on a mission requiring special protection.

(8) To minimize the danger of fire or explosion caused by static sparks, positive bonding connections are required between fuel tank trucks and the source from which the tank truck is being filled or offloaded, and the grounding of tank trucks is required before approaching the fuel tank.

k. Carbon monoxide poisoning precautions.

(1) Vehicle engines will not be operated in a maintenance facility longer than needed to move the vehicle in or out. If vehicles must be operated in a maintenance facility, an exhaust ventilation system that adequately exhausts vehicle engine gases will be used.

(2) Maintenance facilities and other enclosed areas used for vehicles will be ventilated adequately at all times to prevent overexposure to exhaust gases from vehicle engines or space heaters.

(3) Sleeping in parked vehicles with the engine heater, or externally mounted generator running is prohibited. Carbon monoxide poisoning may result from exhaust gases entering the vehicle.

(4) When the power train, cooling, and exhaust systems are separated from the crew by engine access panels, the operator will ensure that the panels seal properly to prevent carbon monoxide from entering the crew compartment. Commanders of organizations that have vehicles of this type will ensure annual carbon monoxide tests are conducted, under full working conditions, by trained personnel using calibrated test equipment. Commanders should coordinate with their local preventive medicine office for support. Any vehicle that fails the annual carbon monoxide test will be considered non-mission capable until the vehicle satisfactorily passes the test.

l. Vehicles that make frequent stops. Vehicles that make frequent stops (for example, police, garbage detail, trail vehicles, and so forth) will be equipped with fully operational rotating warning lights, either portable or permanently mounted and visible for 360 degrees.

m. Specialty vehicles.

(1) Commanders of organizations that utilize COTS, utility vehicles, referred to as specialty vehicles, such as Segway HT, M–Gators, Gators, "Mule" utility vehicle, aircraft–Tugs, in garrison or tactical environments, will establish the following:

(a) An SOP that includes at a minimum, the safe operations, limits of operational work areas, PPE, and vehicle safety equipment requirements.

(b) A driver qualification and training program.

(2) Operators must possess a military operator's permit with the vehicle qualification annotated on the operator's OF Form 346 (U.S. Government Operators Motor Vehicle Operator's Identification Card).

(3) Commanders will establish "operational work areas" to limit the travel of non-tactical specialty vehicles that are routinely used in garrison areas on Army installations. An operational work area is that area in which a specialty vehicle can travel that is not on a public or installation roadway.

(4) Manufacturer installed safety equipment will be maintained in working order.

(5) Tactical specialty vehicles such as the M–Gator will not be driven on installation or public roads except to cross the roadway and it will only be driven on a public roadway at designated crossing points or with a road guard.

(6) Operators will not exceed the recommended load carrying capacity, personnel capacity, or maximum safe vehicle speed. Cargo items will be secured as necessary to prevent tipping.

(7) Occupant protective devices will be worn by operators and passengers of specialty vehicles where installed by the manufacturer.

(8) Adequate head protection is required for operators and passengers operating or riding in tactical specialty vehicles and for operators and passengers of non-tactical vehicles operated outside of the designated operational work areas.

(a) For Segway HT, the minimum head protection standard for garrison operations is an approved bicycle helmet.

(b) Operators of tactical specialty vehicles will wear approved head protection (helmet) that at a minimum conforms to DOT 218 standards or equivalent, protective goggles or face shield, full fingered gloves, long sleeve shirt or jacket, long trousers, and over the ankle boots. Commanders may authorize the use of helmets that offer ballistic protection in lieu of DOT 218 standards when the tactical situation dictates such use.

(c) Operators will wear approved head protection (helmet) that at a minimum conforms to DOT 218 motorcycle safety standards or equivalent, and passengers of non-tactical specialty vehicles that are not equipped with manufacturer installed rollover protection, and are operated on installation or public roads that are outside the designated operational work area.

(9) Non–tactical specialty vehicles that are allowed to operate outside a controlled work area and on installation streets, roads, and highways will meet the minimum vehicle safety standards in accordance with 49 CFR 571.5, to include rollover protection, occupant protective devices, and placement of "Slow Moving Vehicle" emblems where required.

11–5. Safe movement of personnel

a. General movement of personnel.

(1) The following safety precaution must be in place before transporting troops in vehicles:

(a) Fixed seating is installed and passengers are seated wholly within the body of the truck.

(b) The body is equipped with stakes or sideboards, rear safety strap or tailgate protection, and tailgate step or ladder.

(c) Canvas tops are in place with sides rolled down when cargo space is used for passengers at the discretion of the commander.

(2) Before starting the engine, operators transporting passengers in trucks must ensure that the tailgate, safety device, or safety strap is in place and determine that all passengers are in a safe position.

(3) Operators will follow passenger carrying capacities for tactical and administrative vehicles as per TB 9–639 or the appropriate vehicle TM.

(4) Passengers may be transported without fixed seating for short distances on the installation if each passenger remains seated and wholly within the body of the vehicle.

(5) Personnel will not be transported in the bed of an Army truck, off post, unless the truck is specifically designed to carry troops.

(6) When transporting passengers in cargo trucks in which cargo is loaded, ensure they are seated in fixed seats and the cargo is adequately secured.

(7) Transportation to and from troop training or maneuver areas may be done with cargo trucks provided such transportation is part of training and the vehicle is equipped with fixed seating.

(8) When transporting large numbers of Soldiers for training purposes, only approved semitrailers such as, van, personnel carrier 80–passenger, are authorized. No other types of semitrailers are considered safe to transport personnel.

b. Movement of personnel in cargo trucks.

(1) When transporting personnel in cargo truck convoys, the last vehicle in the convoy will not be used to carry passengers.

(2) Transporting troops in the bed of dump trucks shall only occur on an emergency basis and with extreme caution. When troops are transported in dump trucks, fixed seating will be installed and positive locking devices will be used to prevent accidental activation of lift controls.

c. Transportation in 15–passenger vans.

(1) Fifteen–passenger vans do not meet the federally mandated safety standards required for school buses, and cannot be used to transport pre–primary, primary, or secondary school age children to and from school. Fifteen–passenger vans may be used to transport children to and from childcare facilities and youth service centers if—

(a) Use of the 15–passenger vans is restricted to driving within the boundaries of the installation.

(b) 15–passenger vans are only operated during daylight hours.

(2) The use of 15–passenger vans to transport children to and from childcare facilities and youth service centers will not be allowed after 30 September 2008.

(3) Commanders will ensure that personnel who operate 15–passenger vans—

(a) Are experienced drivers with good driving records.

(b) Are trained on the hazards and handling characteristics associated with 15–passenger vans.

(4) Multifunctional school activity buses are not considered school buses and cannot be used for daily transport of students to and from school because they do not meet federally mandated safety guidelines. Multifunctional school activity buses should be used whenever transportation is required for after school activities, field trips, and so forth. Multifunctional school activity buses provide a safer means of transportation than the 15–passenger van (see HSPG Number 17 for student transportation safety). Provisions shall be made to reduce the danger of death or injury to children while they are being transported to and from school or related activities in DOD or contractor–owned vehicles.

(5) In CONUS, DOD school buses shall be marked, equipped, operated, and maintained consistent with AR 58–1 and 49 CFR 571.

(6) Contractors shall comply with HN or state and local requirements in addition to any contractual requirements imposed by the applicable Army installation.

11–6. Tactical vehicle safety

a. Requirements. The following safety requirements apply to vehicles operated in noncombat tactical environments:

(1) Before a vehicle is started in an assembly area, a crewmember will walk completely around the vehicle to ensure that no one is in danger and that the area is free of obstructions or material that could be impacted by the vehicle.

(2) Tactical vehicle operators will keep service drive lights on at all times when on public roadways outside military installations except where SOFA or local laws prohibit use of headlights during daylight (sunrise to sunset) hours.

(3) All safety standards (including speed limits, passenger transportation standards, and vehicle maintenance) apply during tactical operations. Any deviation from the standard will be properly assessed utilizing the mishap risk management component of CRM process. Leadership at the appropriate risk acceptance authority level will grant subsequent approval.

(4) Tactical vehicles operated on public highways will not exceed posted speed limits or speed restrictions addressed in the vehicle's operator manual, whichever is less. Additionally, tactical vehicles will be operated at speeds appropriate for the environmental conditions.

(5) Personnel will not expose more than their head and shoulders (name tag defilade) while riding in tactical vehicles that have hatches, except when actively engaging targets with the vehicle mounted weapons systems.

b. Convoy operations. Convoy operations will be conducted in strict compliance with FM 55–30 and FM 4–01.011.

11–7. Driver education (HSPG Number 4)

a. Army Traffic Safety Training Program. The Army Traffic Safety Training Program is required training for all Army personnel. The training is established to reinforce a positive attitude toward driving, individual responsibility, and correct response to routine and emergency driving situations. Each progressive traffic safety–training course builds on the previous module to reinforce the Army's expectations for a safe Army driver.

(1) *Introductory Training Course I.* During initial entry training all Soldiers shall be given traffic safety training at Advanced Individual Training (AIT). The course will establish and reinforce a positive attitude toward driving, individual responsibility, and correct response to routine and emergency driving situations.

(2) *Local Area Hazard Training Course II.* All Army personnel who are newly assigned to an Army installation/theater will receive a briefing on the local driving hazards they may encounter while serving at that installation.

(3) *Intermediate Traffic Safety Training Course IIIA*. All newly assigned Soldiers less than 26 years of age will receive intermediate traffic safety training that reinforces the initial traffic safety–training course. Other personnel may be required to attend the training as deemed necessary by the local command.

(4) *Traffic safety instruction*. All newly assigned Army supervisors will receive traffic safety instruction on their responsibilities and the expectations of the Army Traffic Safety Training Program.

(5) *Accident Avoidance Training Course*. Anyone who operates an AMV will have first completed the online accident avoidance course as part of licensing procedures. The training includes mishap risk management component of CRM, personal responsibility, driving hazard awareness, defensive driving techniques, accident avoidance, and motorcycle safety.

(a) Tactical vehicle drivers are required to complete additional vehicle specific training as required by AR 600–55.

(b) The online accident avoidance training will be repeated every 4 years as part of the license renewal procedure.

b. Remedial driver training. Installation commanders may establish a remedial driver training program to instruct and educate military personnel requiring additional training. Personnel will be identified for the program based on their individual driving records. The curriculum should provide instruction to improve driver performance and compliance with traffic laws.

11–8. Unit privately owned vehicle safety inspections

Unit commanders will ensure that unit POV safety inspections are conducted for their Soldiers. Reinspections should be conducted when unsafe conditions are identified. Vehicle inspections should include verification of motorcycle rider training, licensing, and PPE. Example inspection checklists are included in the POV risk management toolbox accessed through the USACRC Web site at https://crc.army.mil. (At a minimum, this inspection is required every 6 months.)

11–9. Motorcycle safety

a. Licensing.

(1) Operators of Government–owned and privately owned motorcycles (both street and off–highway versions) on Army installations must be appropriately licensed to operate on public highways except where not required by the applicable SOFA or local laws.

(2) A valid OF Form 346 or DA Form 5984E (Operator's Permit Record) fulfills the licensing requirement for operators of tactical motorcycles.

(3) Where state or local laws applicable to the installation require special licenses to operate privately owned motorcycles, motorized bicycles (mopeds), motor scooters, or all–terrain vehicles (ATVs), such license requirements, at a minimum, shall be required for operation of those vehicles on Army installations.

(4) Minibikes, pocket bikes, and similar vehicles do not meet Federal highway safety standards and therefore will not be operated on installation roads. These vehicles may be operated in designated areas (off–installation roads) as designated by the installation commander.

(5) Motorcycle riders who operate motorcycles on or off post must comply with the skills training, licensing, and permit requirements of their state, HN, or SOFA.

b. Motorcycle training.

(1) Prior to operation of any motorcycle, Army personnel will successfully complete a Motorcycle Safety Foundation (MSF) or MSF–based approved motorcycle rider safety course. Commanders are not authorized to waive or defer the training.

(2) Anyone who operates a motorcycle on an Army installation, to include Government–owned motorcycles, shall successfully complete a MSF–based rider safety course, or present documentation of previous attendance.

(3) The Army standard motorcycle rider's course is an MSF–based Basic Rider Course (BRC). Commanders may offer the Experienced Rider Course (ERC) in addition to the BRC, but not in lieu of the BRC. The ERC is designed to provide additional highway safety skills for experienced motorcycle riders. It is highly encouraged that both courses be

offered to ensure adequate training for both new and experienced riders. The ERC builds upon and provides additional skills taught in BRC or gained through previous experience. Anyone who has documentation of prior completion of the ERC will be in compliance with the Army standard for motorcycle training and will not be required to attend the BRC.

(4) Operators will not be required to repeat BRC training when relocating to a new assignment. This does not restrict commanders from requiring additional motorcycle safety training specific to that location.

(5) Licensed motorcycle operators who have not yet completed the requirements of paragraph 11–9b(1), may operate their motorcycle to travel to the rider course training site. When the training is offered on an Army installation, the licensed operator may enter the installation for the sole purpose of attending the course. The rider will have documentation in their possession to show the date of the course.

(6) Personnel who operate privately owned ATVs or motorcycles off–road should complete appropriate operator safety training.

c. Motorcycle vehicle equipment.

(1) When operated on any DOD installation, in both on– and off–road modes, all Government–owned or privately owned motorcycles, mopeds, motor scooters, and ATVs (when equipped) must have headlights turned on at all times, except where prohibited by military mission, the SOFAs, or local laws.

(2) Motorcycles shall be equipped with both a left–hand and right–hand rear view mirror mounted on the handlebar or fairing. (Note that Government–owned off–road motorcycles on tactical missions or training are exempt from this requirement.)

d. Motorcycle personal protective equipment. The following PPE is mandatory for the following personnel while operating or riding as a passenger on a motorcycle, moped, or ATV: all Army military personnel at any time, on or off a DOD installation; all Army civilian personnel in a duty status, on or off a DOD installation; all personnel in or on a DOD–owned motorcycle; and all persons at any time on an Army installation.

(1) Helmets, certified to meet DOT standards, must be properly fastened under the chin. Outside CONUS riders may wear HN helmets if the helmet meets or exceeds U.S. DOT standards.

(2) Impact or shatter resistant goggles, wraparound glasses, or fullface shield properly attached to the helmet must meet or exceed ANSI Safety Code Z87.1, for impact and shatter resistance. A windshield alone is not proper eye protection.

(3) Sturdy footwear, leather boots or over the ankle shoes must be worn.

(4) A long sleeved shirt or jacket, long trousers, and full fingered gloves or mittens designed for use on a motorcycle must be worn.

(5) For on–road operations, a brightly colored, outer upper garment during the day and a reflective upper garment during the night. Military uniforms do not meet this criterion. The outer garment shall be clearly visible and not covered. Items may be worn on top of the outer garment, but they must meet the same visibility requirements of the outer upper garment.

(6) During off-road operations, operators and riders must use additional PPE, such as knee and shin guards and padded full fingered gloves.

(7) Installation commanders will ensure motorcycle operators, when entering the installation, are properly licensed, have successfully completed a motorcycle rider course, and are wearing the required personal motorcycle safety equipment.

e. Tactical motorcycle and all–terrain vehicle operations.

(1) For tactical motorcycle operations, the wearing of PPE will be based on the commander's composite risk assessment of mission requirements.

(2) Prior to tactical motorcycle and ATV operations, operators will be trained on the tactical operations and on the controls that have been implemented to mitigate hazards. Curriculum and proficiency training for tactical motorcycles and Government furnished (tactical and non–tactical) ATVs will be tailored to satisfy specific mission objectives. In addition to the above training, governmental motorcycle operators will have completed the training required in paragraph 11–9b(2). Government ATV operators will complete the Specialty Vehicle Institute of America based course.

11–10. Army combat vehicle safety guidelines

a. Army combat and track vehicle commanders. Each ACV will have a track commander (TC) or VC who will occupy the commander's position within the vehicle. The TC or VC will receive vehicle specific training on the vehicle capabilities and limitations.

b. Operator and crew safety.

(1) Operators will not start ACVs unless the portable and fixed fire extinguishers are present and in operating condition.

(2) The intercom must be operational and in use. The movement of an ACV without a TC or VC and a working intercom or dismounted ground guide is prohibited.

(3) The positive safety–locking pin will be used to fasten open hatches to avoid accidental closing during movement of the vehicle.

(4) Crew personnel will not wear rings or bracelets while conducting vehicle operational duties or when performing vehicle maintenance.

(5) Personnel in ACVs will wear protective headgear. The crew will wear fully operational CVC helmets or approved ballistic helmets with chinstrap fastened.

(6) Personnel exposed to eye hazards will wear appropriate eye protection.

(7) Personnel will not position themselves between an ACV and another vehicle or fixed object while the vehicle is moving or being slaved (started with jumper cables).

(8) Personnel in hatches will not expose more than their head and shoulders "nametag defilade." When nametag defilade is not observed, commanders must establish clear guidance and implement controls to mitigate or eliminate the added risk. All other personnel will ride with their bodies completely inside the vehicle.

(9) Riding on the exterior of ACVs is prohibited except where outlined as an accepted practice in an Army TM or field manual.

(10) Seated personnel will wear occupant restraints, unless specifically exempted in the unit SOP or by the commander after completing mishap risk management component of CRM for the mission.

(11) When vehicles and dismounted personnel are training together during darkness, the dismounted personnel will notify vehicle operators and TCs or VCs of their location.

(12) Operators of ACVs will stop at railroad crossings without electric signal lights or road guards and check the clearance in both directions before crossing.

c. Rollover drills and emergency procedures.

(1) Personnel riding in ACVs will be trained in crew rollover, fire, and emergency egress drills. The drills will be conducted prior to gunnery, field training exercises, or combat missions.

(2) Rollover drills will be conducted prior to every tactical training or actual deployment cycle.

d. Bivouac and Assembly Areas.

(1) Commanders will ensure sleeping area perimeters are designated and marked. Select sleeping areas protected by natural obstacles when possible.

(2) Where access to bivouac or an assembly area is restricted to road entry, a guard should be posted to warn vehicle crews that there are troops on the ground.

(3) Prior to leaving a motor pool or assembly area in tactical environments, the TC or VC will walk completely around the vehicle to check for personnel or other hazards in the vicinity of the vehicle.

(4) Operators will move ACVs in motor pools, parking areas, cantonments, assembly and sleeping areas only when a dismounted ground guide(s) assists. When visibility is reduced, guides will use flashlights to direct vehicles. The TC or VC, driver, and dismounted ground guide will maintain visual contact at all times.

(5) Operators of combat vehicles will stop at railroad crossings without electric signal lights or road guards and check both directions before crossing.

11–11. Pedestrian and bicycle safety

a. Pedestrian safety. Pedestrian safety shall be an integral part of each installation traffic safety program. The program shall include—

(1) Separation of pedestrian and motor vehicle traffic to the maximum extent possible.

(2) Posting regulatory speed limit signs at all vehicle entrances to military installations. In concentrated troop areas (for example, company areas, billeting areas) and along all routes of troop march, regulating signs will be posted that limit vehicle speed to 10 MPH.

(3) Sidewalks, pedestrian crossings, handicap access ramps, and bicycle paths must be constructed in accordance with Manual on Uniform Traffic Control Devices for Streets and Highways.

(4) Educational programs that will assist leaders promote use of paths or sidewalks along roadways and wearing reflective outer garments during periods of reduced visibility.

(5) Special emphasis on the protection of children walking to and from school, entering and leaving school buses, and playing in DOD housing areas.

(6) Individuals are not authorized to skate, jog, run, or walk on roadways during high traffic density and peak traffic periods. Installation commanders shall designate which roadways and times that apply. Installation commanders shall establish designated routes for organized physical training formations that will limit exposure of troops to motor vehicle traffic.

(7) Personnel running, not in troop formation, will wear reflective vests or belts during hours of limited visibility.

(8) The wearing of portable headphones, earphones, ear or other listening devices while jogging/running, bicycling, or skating/skateboarding on or adjacent to roadways or roadway intersections on DOD installations is prohibited.

(9) Approved protective headgear will be worn while using powered and non–powered scooters, skateboards, roller skates, and roller blades. Hand, elbow, and knee protection is highly recommended for these type activities.

b. Bicycle safety.

(1) Bicycle safety shall be an integral part of each installation traffic safety program.

(2) Bicycle helmets, approved by the Consumer Product Safety Commission (CPSC) will be worn by all personnel including Family members who ride bicycles on Army installations. Previously purchased bicycle helmets certified by the American Society for Testing and Materials may also be worn but when purchasing a new helmet, riders should look for the CPSC certification. Outside CONUS riders may wear HN helmets if the helmet meets or exceeds CPSC standards.

(3) For Government–owned 3–wheeled bicycles that are operated within "operational work areas," commanders may use CRM procedures to determine exceptions to the helmet requirement.

(4) The wearing of headphones, earphones, or other listening devices while bicycling on or adjacent to roadways on DOD installations is prohibited.

(5) When bicycling on roadways on DOD installations during hours of darkness or reduced visibility, bicycles will be equipped with operable head and taillights, and the bicyclist will wear a reflective upper outer garment.

c. Issued personal protective equipment.

(1) Fluorescent or reflective PPE shall be provided to and used by all personnel who are exposed to traffic hazards as a part of their assigned duties, for example, marching/running/jogging troops, road guards, traffic control personnel, road construction crews, police call, electricians, or telephone repair personnel working on outside overhead lines.

(2) Troop formations, during periods of reduced visibility, will post front and rear guards 30 meters in front and to the rear.

(3) Troop formations moving on roadways during periods of darkness will be provided flashlights with wand or luminescent chemical lights.

Part Two
Sustaining the Soldier

This part addresses those special Army Safety Program management functions that are appropriate to sustaining the Soldier during training, mobilization, tactical and field operations in the garrison or during contingency and wartime conditions. Sustaining the Soldier presents unique challenges due to his or her duties, the intensity of training and the fact he or she is a Soldier 24 hours a day, 7 days a week. The principles and concepts stated in this part can be applied to Army civilians as well.

Chapter 12
Force Mobilization

12–1. Intent

This chapter establishes the minimum safety requirements for projecting combined Active Army and Reserve Component (RC) ARFOR into any environment during hostilities and contingency operations. Transformation of today's Army and new world challenges lead to combining different types of units with varying degrees of modernization together with multinational forces and civilian agencies to achieve effective and efficient unified action. This places a great demand on Soldiers and leaders. Therefore, CRM will be used to identify and control hazards.

12–2. Application of composite risk management

A Soldier's job comes with a certain level of risk. Operational conditions often impose significant risks to Soldiers' lives and health and make equipment operation difficult. When applying CRM, use mission, enemy, terrain and weather, troops, time available, and civil considerations to systematically identify hazards in accordance with FM 3–0.

12–3. Standards

a. Safe operations come from enforcing standards during training and then applying them during actual operations. Therefore, Army leaders will train to the standards and hold Soldiers accountable to follow them during all operations.

b. A common deployment concern is that individuals abandon safety in an effort to establish "combat posture." Therefore, leaders are to ensure that the CRM process is incorporated in regulations, directives, SOPs, special orders, training plans, and operational plans to minimize accident risk, and that SOPs are developed for all operations entailing risk of death, serious injury, occupational illness or property loss.

c. Leaders will establish a command climate from the outset that promotes safety and takes every measure and precaution to keep Soldiers healthy and maintain their morale. This will be initiated by establishing a safety network and designating safety personnel at all levels.

d. Soldiers will enforce standards and require their peers and all personnel to perform to standard in all operations.

12–4. Operational deployment areas of consideration

The actions that take place prior to deployment are crucial to a successful deployment. Safe deployment operations

demands a commitment of commanders and leaders at every level to ensure Soldiers execute to standard throughout the operation (for example, strategies and procedures will be developed to address rail operations, convoy operations, aviation operations, port operations (sea and air), and so forth).

12–5. Health Issues

a. Pre–deployment medical/dental screening and appropriate pre–deployment prophylaxis (measures designed to preserve health) are vital and will be instituted prior to deployment.

b. Medical and environmental health threat briefings will be provided to Soldiers so they are aware of and prepared for the risks in the theater of operations.

c. Proper education and pre–deployment medical/dental screening will be used to prevent unnecessary loss of Soldiers during all phases of deployment.

d. Ensure the Occupational and Environmental Health Surveillance requirements as delineated in DODI 6490.03 are implemented.

12–6. Postmobilization

Soldiers returning from deployments must be reintroduced into their non–deployment roles as Soldiers, husbands, wives, mothers, fathers, and citizens so that they readjust to the new stressors and different demands. Therefore, strategies and procedures will be developed to—

a. Complete DD Form 2796 (Post–Deployment Health Assessment).

b. Assess, treat, and document adverse or potentially adverse exposures or negative health related behaviors during mobilization and demobilization.

c. Provide health threat briefings to educate spouses on health related symptoms and myths, to include information on identifying potential signs and symptoms of distress and treatment options.

d. Provide briefing and education on changes in relationships, single Soldier parent issues, and child behaviors.

e. Provide training in suicide awareness and prevention, individual and Family communication, and a medical threat brief.

12–7. Reintegration

With continued deployments and redeployments of Soldiers, all leaders will mitigate risks by ensuring every Soldier knows his or her role and that they remain focused on the inherent dangers.

a. Before a Soldier leaves the theater, leaders should adopt a program that includes training sessions, redeployment surveys, and medical screening.

b. Upon return, the process continues during a set number of days, offering classes, additional medical screening, and information to Soldiers and their Families prior to the Soldier taking leave. This helps smooth the reunion process for Soldiers and their Families, to help participants recognize and establish realistic expectations about the reunion. They will learn to spot symptoms of stress, learn about sources of assistance, and the importance of communication.

c. Privately owned vehicle safety will be included and highly emphasized in reintegration training before and after deployment.

12–8. Risk refamiliarization, postdeployment, and reconstitution

Leaders are responsible to reduce the likelihood at–risk behavior during postdeployment and reconstitution. A primary consideration should be to reset each individual's risk acceptance threshold. The following will be developed and used to expedite the process:

a. Returning personnel may not have driven on congested U.S. highways or been involved in social drinking situations for several weeks or months. Therefore, briefings will include seatbelt safety; safe driving factors such as speed limits, rest stops, and focus of attention; alcohol consumption and driving, swimming, boating, and operating other recreational vehicles; alcohol use and domestic violence; Army substance abuse policy (zero tolerance for illicit use); and motorcycle safety.

b. Review the last risk reduction quarterly statistics received prior to deployment for indications of at–risk behaviors and the interventions needed to reduce the likelihood of reoccurrence. Plan to incorporate those interventions during reconstitution.

c. Each leader/commander should develop and use an individual risk assessment, which should begin during redeployment and continue through reconstitution.

d. Schedule a unit risk inventory within 90 days of arriving at home station.

Chapter 13
Tactical Safety

13–1. General

a. This chapter establishes the requirements for safety support during training, contingency, and tactical operations. Unless otherwise specified the provisions of this regulation apply to both peacetime training operations and operations in a combat theater. The tactical safety element is intended to reduce losses of manpower and equipment thus conserving combat power.

b. Composite risk management will be integrated into all tactical and contingency operations in accordance with FM 5–19. Analyze all expected tactical threat–based and accidental hazard–based vulnerabilities to determine associated risk. Implement, enforce and review appropriate control measures. Eliminate all hazards on a greatest risk first basis.

13–2. Preparation for tactical operations

Preparation for tactical operations must be completed as far ahead of time as possible before deployment to ensure complete, accurate, efficient and safe procedures and policies are in place.

13–3. Tactical order

All plans and orders will address CRM and safety management specific issues in accordance with FM 5–0, and applicable operational specific field manuals. The results of the composite risk assessment and countermeasures will be integrated throughout the order as applicable.

13–4. Army civilian safety personnel deployment

Deployment of Army civilian safety personnel will be accomplished in accordance with AR 690–11 and DA Pam 690–47.

13–5. Safety personnel planning

Prior to contingency and tactical operations, all unit safety personnel and collateral duty safety personnel should—

a. Meet to review the operations order, its safety implications, and coordinate responsibilities.

b. Ensure that means have been established to meet periodically during the training and contingency and tactical operations to meet and share experiences and lessons learned.

c. Ensure that means of contacting each safety individual is in place.

13–6. Safety training

All participants will be provided safety training in those areas needed for a safe and efficient execution of the operation. This training shall specifically address—

a. The PPE required.

b. General safety requirements particular to the contingency and tactical operations.

c. Special safety requirements.

d. Lessons learned from previous contingency and tactical operations.

e. Procedures for reporting and responding to accidents.

13–7. Army Safety Augmentation Detachment

a. The Army Safety Augmentation Detachment (ASAD) consists of IMCOM Soldiers who are trained in safety through the Combat Safety Officers Course.

b. The mission of the ASAD is to provide trained augmentees in the event of mobilization to serve as unit safety officers/NCOs for brigade and larger units. The ASAD is the DOD–unique organization providing ground safety support to worldwide contingency and Army Joint training exercises.

c. Requests for support must be forwarded through DCS, G–3/5/7 tasking channels to HQ FORSCOM (AFPE–SO). Requests should normally be submitted no less than 60 days in advance of the requested start date and will be submitted in accordance with AR 500–5, FC REG 350–12, Procedures for Tasking and Support from Active Component Installations and Units, and FC REG 500–3–1, Vol 1, Annex E (Forces Command (FORSCOM) Mobilization and Deployment Series (FORMDEPS)).

13–8. Tactical water safety operations

Commanders of units conducting water operations will develop and implement standard procedures and advanced training for vehicle swimming, fording operations and stream crossings. Commanders in the grade of 0–6 and above must approve deviations from the SOP.

13–9. Environmental hazards

Department of the Army policy is to conserve the Army's fighting strength by controlling preventable disease and

injury through command-oriented occupational, environmental, and personal protection programs. All personnel are responsible for maintaining their own health and fitness. Preventable personnel losses from heat, cold, diseases or other environmental factors are important. History has repeatedly shown that non-battle losses have played a significant role in the outcome of military operations. While mission requirements will dictate unit policies, commanders must evaluate the effects of environmental hazards on their ability to complete the mission. The following hazards must be assessed using the CRM process and appropriate methods taken to minimize the risk:

a. High altitude.
b. Disease vectors.
c. Contaminated food and water.
d. Poor air quality.
e. Heat.
f. Cold.

13–10. Bivouac areas

Many accidents occur in bivouac areas (especially at night) and most are due to violation of existing standards and complacency. Commanders must enforce discipline in bivouac areas to minimize accidents and provide procedures for—

a. Site selection.
b. Camouflage.
c. Field sanitation.
d. Generators.
e. Field mess operations.
f. Storage of flammable.
g. Fire extinguishers.
h. Grounding of equipment.
i. Restriction/control of motor vehicles.

13–11. After action reports

Document hazards encountered and controls used to control them, as well as how safety planning could have been improved to better serve the mission.

Chapter 14
Safe Cargo Operations

14–1. General

This chapter establishes safety requirements for cargo operations by all transport modes during routine transport and deployment/redeployment operations.

14–2. Maximizing safety in cargo transport operations

a. Cargo preparation operators will be trained in material compatibility rules, packaging procedures, and package marking and labeling appropriate to the material and transport mode.

b. Cargo loading operators will be trained in—

(1) Controlling transport unit weight and balance.

(2) Cargo securing techniques appropriate to the material, packaging configuration, transport unit being loaded, and the transport mode. Materials appropriate to the job shall be provided.

c. Personnel handling cargo that qualifies as HAZMAT will also—

(1) Receive general safety training concerning properties and hazards of HAZMAT, the procedures to take in event of a leak or spill, and specific details of their duties in accordance with the transportation modes to be used.

(2) Be assigned duties only for which they are specifically trained.

(3) Perform duties in accordance with the applicable national or international transportation mode regulations for the journey. Within the CONUS, 49 CFR applies. Outside the United States, international regulations and HN regulations apply. Commanders must ensure that individuals assigned hazardous materials tasks have ready access to current regulations required to perform their duties. Generally, the governing regulations are—

(a) 49 CFR for CONUS transports.
(b) International Maritime Dangerous Goods Code for sea transport.
(c) Air Force Joint Manual 24–204 (TM 38–250) for military air transport.
(d) International Air Transport Association Dangerous Goods Regulation for commercial air transport.

(4) Package, mark, label, load, and placard the transport unit in accordance with the applicable mode regulation.

d. Commanders do not have the authority to risk assess statutory requirements concerning vehicle loads, especially concerning hazardous materials. An exemption or competent authority approval must be obtained prior to using alternative procedures.

e. A vehicle driver has the authority to refuse a load that he believes violates any safety provision for which he may be held liable during the journey.

f. Assistance—

(1) The SDDC provides guidance publications supporting cargo loading at http://www.tea.army.mil/DEP/TRANSPORT/modes/default.htm.

(2) The Defense Ammunition Center provides certification training and computer–based HAZMAT familiarization training at https://www3.dac.Army.mil/AS/.

(3) A HAZMAT training center located at Aberdeen Proving Grounds, MD also provides training on how to handle HAZMAT.

14–3. Railhead, port, supercargo, and escort operations

a. Specific operations. Commanders and other leaders who are planning or conducting these operations will use the information to help them assess hazards and risks. The tables will be used as a starting point in assessing and controlling specific operations.

b. Simultaneous operations. Many of these operations require maneuvering in tight spaces with multiple simultaneous operations in the immediate vicinity. Personnel assigned to operate vehicles and material handling equipment (MHE) shall be trained, licensed and experienced. Ground guides will be used and will be conspicuous by lighting or color.

c. Railhead operations.

(1) A railhead safety officer and safety NCO will be appointed.

(2) Commanders shall implement a railhead certification program for units assigned to rail loading operations, with assistance of local movement control or rail personnel.

d. Port operations.

(1) A port operations safety officer and safety NCO will be appointed.

(2) Personnel involved in port operations shall be trained in their respective duties and the hazards involved in the operating area.

e. Supercargo operations.

(1) Supercargoes refers to unit personnel who will be designated on orders by deploying units to accompany, supervise, maintain, and guard unit equipment aboard a ship or vessel. An essential part of their job is to monitor and adjust equipment lashings and tiedowns, control access to cargo, document items that cannot be repaired en route, and to brief the port commander at the seaport of debarkation (SPOD) on vehicle conditions and any unusual circumstances concerning the cargo. Supercargoes may also provide maintenance support and liaison during cargo reception at the seaport of embarkation (SPOE) and during ship loading and discharge operations.

(2) Supercargoes carrying weapons will be briefed on specific rules of engagement and operate under the agreement between the Government and the ship's captain.

(3) The ship's captain is the ultimate authority on the ship and his orders must be obeyed. The first mate is the captain's designated operations officer. Problems will be reported to the first mate (see FM 55–50 and FM 55–60 for supercargo operations information and a generic risk assessment).

f. Escort operations.

(1) Escorts, similar to supercargoes, will be designated on orders by deploying units to accompany, supervise, maintain, and guard unit equipment aboard a vehicle or train. Escorts aboard trains will be briefed in accordance with FM 55–21 concerning rail specific hazards.

(2) Escorts shall not climb on equipment loaded on rail cars once the car is prepared for movement.

(3) Escorts carrying weapons will be briefed on specific rules of engagement and operate under the agreement between the Government and the HN.

14–4. Ammunition and explosives transport requirement excerpts for continental United States transport

a. Vehicles must either be a completely enclosed van type or be equipped with side stakes with the cargo protected by a tarpaulin or canvas top that completely covers the load.

b. Cargo must be secured against movement in any direction.

c. Army vehicles transporting ammunition or explosives will be equipped with at least two classes 2–A 10BC or equivalent fire extinguishers.

d. Vehicle brakes will be set and at least one wheel chocked during all loading, unloading, and tiedown operations.

e. DA Pam 385–64 and FM 4–30.13 provide guidance in transporting captured enemy ammunition.

f. Emergency response information for ammunition or explosives (CONUS shipments only) will follow instructions on DD Form 836 (Dangerous Goods Shipping Paper/Declaration and Emergency Response Information for Hazardous Materials Transported by Government Vehicles), in the event of an accident involving HAZMAT. For materials shipped from CONUS to OCONUS and from OCONUS to CONUS, emergency response will be in accordance with the IMDG–Code (International Maritime Dangerous Goods Code.) Emergency contact phone numbers for transportation information will be indicated on the shipping papers.

g. Transport of ammunition or explosives outside the United States is subject to additional and/or different international regulations and HN requirements.

14–5. Biological agents and toxins transport requirement excerpts for continental United States transport

a. The transportation of select biological agents and toxins on DOD installations will be kept to a minimum and will be in accordance with this regulation, DA Pam 385–69, 42 CFR, 49 CFR 173, 9 CFR 121, as well as applicable DOT regulations and guidance pertaining to shipping containers, supporting documentation, and placarding of transportation vehicles.

b. Select biological agents and toxins will be secured or in the direct control of a biological personnel reliability program-certified individual while awaiting transportation.

c. Transport outside the United States is subject to additional and/or different international regulations and HN requirements, and may be forbidden without specific permit.

Chapter 15
Aviation Safety Management

15–1. Introduction

This chapter—

a. Establishes the safety component of protecting the force as an integral part of Army aviation training and operations.

b. Provides responsibilities, policies, and duties for the integration of safety and CRM into existing command processes and in accordance with FM 5–19 and DA Pam 385–90.

15–2. Aviation Safety Policy

a. Commanders, supervisors, and safety directors at all levels will comply with the following policies regarding the aviation safety. Safety will be a prime consideration in all mission and training planning and operations, including wartime and contingency operations. Army aviation commanders will—

(1) Ensure that safety is a principal element in all aviation operations and will apply CRM procedures in each phase of the training–management cycle to identify hazardous conditions and correct shortcomings responsible for these conditions;

(2) Establish a written commander's safety philosophy that contains current safety goals, objectives, and values, and include the philosophy in quarterly training guidance (annually for Reserve Component).

(3) Employ CRM to ensure that maximum combat power is available for use at the decisive point and time for successful operations. During planning and execution of aviation missions, commanders will integrate mission, enemy, terrain and weather, troops, time available, and civil considerations when applying CRM procedures to identify and control hazards, in accordance with FM 5–19.

(4) Ensure mission after action reports are conducted to assess the effectiveness of CRM and safe performance.

(5) Ensure compliance with DOD, DA, OSHA, National Fire Protection Association, and Environmental Protection Agency (EPA) safety standards and requirements. When conflict exists between the various standards, the more stringent will be applied.

(6) Develop and integrate safety goals, objectives, and values into appropriate training guidance based upon identification of the most probable and severe types of accidents expected and the most likely reasons (hazards) for these accidents.

(7) Ensure that all aviation units have SOPs that include subjects listed in DA Pam 385–90.

(8) Ensure that ASOs are not assigned duties that are not related to the safety component of protecting the force.

b. Each aircrew member is ultimately responsible for ensuring his/her own safety and for expeditiously advising the pilot in command that an unsafe practice is occurring or is about to occur.

15–3. Aviation Accident Prevention Surveys

All Active Army aviation units and USAR aviation support facilities will conduct Aviation Accident Prevention Surveys semiannually, at a minimum. All other units, including Army Headquarters and Direct Reporting Units, will

conduct Aviation Accident Prevention Surveys annually, at a minimum. The "Guide to Aviation Resource Management for Aircraft Mishap Prevention" or a similar guide should be used as a reference. When possible, the Aviation Accident Prevention Surveys should be administered from the battalion/squadron level consolidating the safety staff into a survey team and using supplemental expertise from outside the unit.

15–4. Command safety council and enlisted safety council

A CSC and an enlisted safety council (ESC) will each be designated in writing at battalion level and above. Councils will, at a minimum, meet quarterly to review risk control options, make risk–control–option decisions, and direct implementation of risk control options. The CSC and ESC may be combined as one council in units with a low density of officer or enlisted personnel, such as detachments and platoons. Commanders may consolidate councils (one CSC and one ESC) at no higher than battalion/squadron level.

15–5. Safety meetings

Safety meetings will be conducted monthly for Active Army and full–time RC units/facilities and quarterly for all others.

15–6. Operational hazard

An operational hazard is any condition, action, or set of circumstances that compromises the safety of Army aircraft, associated personnel, airfields, or equipment. Operational hazards should be corrected at the lowest level possible. Operational hazards include inadequacies, deficiencies, or unsafe practices (see DA Pam 385–90). DA Form 2696 (Operational Hazard Report) will be used to record information about a hazardous condition.

15–7. Aviation hazard location map

A detailed hazard location map covering the entire local area will be maintained current and posted for ready access by all crews. Hazards will be analyzed and prioritized in terms of accident severity and probability. Maps will be updated quarterly or as hazards are identified.

15–8. Foreign Object Damage Prevention Program

a. A Foreign Object Damage Prevention Program will be established to find and correct potential hazards and to eliminate the causes of foreign object damage. The importance of reducing foreign object damage as a hazard to aircraft requires that all personnel (pilots, aircrew, maintenance, and ground support) constantly be aware of foreign object damage and take action to prevent this hazard to aircraft and personnel.

b. A unit foreign object damage prevention officer/NCO, other than the ASO, will be appointed to implement the unit foreign object damage prevention program.

15–9. Aviation life–support systems

a. A unit aviation life–support systems program that ensures aircrews are provided with adequate aviation life–support systems as prescribed by AR 95–1 will be developed and implemented. A qualified officer/NCO will be designated to manage the unit aviation life–support systems program.

b. Each aircrew member will have all required items of individual aviation life–support equipment. Each aircraft will be equipped with crew life–support equipment (kits or sets) required for the mission and environment. All life–support equipment will be maintained, inspected, and replaced in accordance with DA Pam 385–90.

15–10. Pre–accident or pre–emergency planning

a. A unit emergency plan will be prepared and maintained in accordance with DA Pam 385–90 and DA Pam 385–10.

b. The unit pre–accident or pre–emergency plan will be rehearsed, reviewed, and its adequacy documented. The degree of response by elements in the emergency plan for a rehearsal can vary; however, an exercise requiring all elements to respond physically must be conducted at least annually.

c. The unit pre-accident or pre-emergency plan should include procedures for response to and investigation of accidents where contractor maintenance supporting unit operations is involved in the accident and the Government has assumed all or some of the risk of loss in the contract.

d. In the event of an Army aircraft accident (Classes A through C), all crewmembers and any other personnel who may have contributed to the accident will be quickly evacuated to medical facilities by aeromedical or ground ambulance for physical examinations and blood and urine testing in accordance with AR 40–8, AR 40–21, AR 40–501, AR 600–105, and DA Pam 385–40.

Part Three
Supporting the Garrison and Industrial Base

Part 3 addresses those special Army Safety Program management functions that are appropriate to sustaining the Soldier and the Army civilian in garrison and industrial operations. The principles and concepts stated in this part apply

to the Soldiers and Army civilians performing their non–combat role during training, contingency operations and in field operations.

Chapter 16
Occupational Safety and Health Program (Workplace Safety)

16–1. Introduction

This chapter prescribes policy and responsibilities for implementation of the OSHA program mandated by Federal or state regulations and to reduce risk of accidental losses, injuries and occupational illness to the military and Army civilian workforce as required by EO 12196, 29 CFR 1960, and DODI 6055.1. The OSHA programs will be implemented in all Army operations CONUS and OCONUS with the exception of military unique operations as defined below. Procedures for occupational or workplace safety are in DA Pam 385–10.

16–2. Policy

a. OSHA programs and national consensus standards shall be applicable to and integrated into all Army equipment, systems, operations, and workplaces, CONUS and OCONUS.

b. Military design, specifications, and deployment requirements will comply with OSHA standards where feasible. When no standard exists for military application or the application is not feasible, the Army component will apply mishap risk management component of CRM.

c. Military and Army civilian officials at each management level shall promote strong safety programs, safe working conditions, and safe performance to prevent accidents, injuries, and occupational illnesses.

d. All Army leaders at each echelon will develop and implement functions and written procedures as part of the Army Safety Program and the Army Occupational Health Program to fulfill the following Army and OSHA requirements:

(1) Ergonomics.
(2) Hazard communications.
(3) Respiratory protection.
(4) Personal protective equipment.
(5) Materials handling training.
(6) Bloodborne pathogens.
(7) Confined space program.
(8) Emergency action plans and fire prevention plans.
(9) Fall protection.
(10) Control of hazardous energy (lockout/tagout).
(11) Process safety management.
(12) Hazardous waste operations and emergency response (as applicable).
(13) Chemical hygiene.
(14) Inspecting and abating hazards.
(15) Reporting of unsafe and unhealthful conditions.

e. Army Safety Program and the Army Occupational Health Program shall be adequately funded to ensure effective implementation to reduce accidental losses in all workplace operations.

f. All personnel shall be trained on all aspects of Army Safety Program and the Army Occupational Health Program at every level of the activity that affects their workplace.

g. DD Form 2272 (Department of Defense Safety and Occupational Health Protection Program) or equivalent poster will be posted in all workplaces, in places of easy access by employees.

h. All workplace hazards shall be addressed in accordance with the hazard control guidance.

16–3. Military unique

a. Title 29 CFR 1960.2(i) defines military unique: "The term uniquely military equipment, systems, and operations excludes from the scope of the order the design of DOD equipment and systems that are unique to the national defense mission, such as military aircraft, ships, submarines, missiles, and missile sites, early warning systems, military space systems, artillery, tanks, and tactical vehicles; and excludes operations that are uniquely military such as field maneuvers, naval operations, military flight operations, associated research test and development activities, and actions required under emergency conditions."

b. "The term includes, within the scope of the Order, Department of Defense, workplaces and operations comparable to those of industry in the private sector such as: Vessel, aircraft, and vehicle repair, overhaul, and modification (except

for equipment trials); construction; supply services; civil engineering or public works; medical services; and office work."

16–4. Installation level processes

Processes will be developed at and for the installation level to:

a. Reduce risk of accidents, injuries, and occupational illness in installation operations.

b. Structure and resource installation safety offices to adequately support all functions required to plan, develop, coordinate, evaluate, and implement Army safety and occupational health programs in accordance with Federal and state statutes, DODI 6055.1 and this regulation.

c. Evaluate installation safety and occupational health programs annually.

d. Implement DA and OSHA policies and program in the workplace to protect personnel, equipment, and facilities.

e. Train all personnel so they sufficiently and fully understand the purpose, policy, procedures, and responsibilities of the Army Safety Program and the Army Occupational Safety Program designed for the office or facility in which they work.

f. Ensure that workplaces are free from recognized hazards that are causing or are likely to cause death or serious physical harm.

g. Correct safety deficiencies that are likely to cause an accident, injury, or occupational illness.

h. Integrate safety priorities for hazard correction into the work control process.

16–5. Army Commands, Army Service Component Commands, Direct Reporting Units, National Guard Bureau, and field operating level processes

Processes will be developed at the ACOM, ASCC, DRU, and NGB level to—

a. Integrate OSHA and national consensus standards into military standards, tasks, techniques, and procedures as appropriate.

b. Emphasize and value the importance of workplace safety through the chain of command to the lowest level.

16–6. Voluntary Protection Program

a. The purpose of OSHA's Voluntary Protection Program (VPP) is to recognize and promote effective safety and health management practices in the workplace. Management and employees work together to ensure a safe and healthful workplace in coordination with OSHA regulations. OSHA verifies that the program meets the VPP criteria, recognizes the site publicly and removes the site from routine scheduled inspection lists.

b. Installations should employ the VPP criteria to demonstrate their commitment to protect Soldiers, Army civilians, and the public by providing a safe and healthful environment. The application guidelines are included in the VPP information kit (VPP Policies and Procedures Manual, TED 8.1a), that is available from OSHA regional offices.

Chapter 17
Workplace Inspections

17–1. Introduction

Under the OSHAct, employers are required to furnish each employee a place of employment that is free from recognized hazards that are causing or likely to cause death or serious physical harm. Workplace inspections are one method to identify hazards in work areas.

17–2. Intent

This chapter provides policy on Army safety program management with special emphasis on hazard recognition and workplace inspections. It implements the requirements of the OSHAct and prescribes DA policy to protect and preserve Army personnel and property against accidental loss, provides for safe and healthful workplaces and assures regulatory compliance. It also provides for public safety incident reporting to Army operations and activities. Procedures and other guidance for workplace inspections and hazard reporting and recording are provided in DA Pam 385–10.

17–3. Policy

a. Supervisors are responsible for conducting periodic documented inspections of their work area to identify hazards. When hazards are reported by employees or identified through accident investigations and safety inspections, they will be evaluated and tracked. Once a hazard is evaluated, prompt action is required to correct significant–risk hazards.

b. Supervisors are to inform all personnel of Army safety and occupational health rules and regulations, to include the use of protective clothing and equipment provided for their protection. Supervisors are to ensure adherence to established procedures, taking appropriate disciplinary action where deemed necessary.

c. Employees, military and Army civilians, are responsible for complying with standard Army safety and occupational health rules, regulations, and standards, using and maintaining the personal protective clothing and equipment that has been provided for their safety, and reporting any unsafe or unhealthful working conditions and accidents to their immediate supervisor.

d. Management and employees will work together to identify and correct hazardous conditions in accordance with locally established procedures for correcting hazards based on RACs on a "worst–risk–first" basis.

e. Employees have the right to request that an OSHA representative conduct an inspection if they believe hazardous conditions are present in the workplace. (Note that employees should contact the local Garrison/Installation Safety Office to resolve any safety hazards prior to contacting OSHA, but are not required to do so.)

17–4. Application of mishap risk management component of composite risk management

The requirements of DA Pam 385–30 will be applied to the hazard assessment, prioritization, and correction.

17–5. Safety inspections

a. Each time the supervisor or an employee enters the workplace, they will conduct a visual safety inspection. Conducting inspections of this type will help integrate safety into the daily routine.

b. Formal documented inspections (for example, using a checklist) will be done periodically to ensure a complete and total evaluation of the workplace based upon the type and nature of the work as well as determining the PPE required.

c. Whenever possible, recognized hazards will be corrected on–the–spot.

d. Submit work orders or service orders for hazards that cannot be corrected on–the–spot. All work orders for significant–risk hazards will go through the supporting Safety Office for addition to the hazard tracking system.

17–6. Standard Army safety and occupational health inspections requirements

a. Qualified safety and occupational health professionals or specially trained personnel competent to conduct the inspection, using the procedures outlined in DA Pam 385–10, will conduct workplace safety inspections at least annually.

b. Facilities and operations involving special hazards will be inspected more frequently as determined by qualified safety and occupational health personnel.

c. Army civilian personnel offices may request assistance in determining environmental differential pay or hazard pay cases. In these cases, qualified safety and health professionals will evaluate specific workplaces and conditions and provide a professional opinion as to the nature of the hazards and the required protective procedures.

d. Inspections of workplaces in contractor activities where fewer than 25 DA personnel are employed will be at the discretion of the Army Headquarters' commander based on existing conditions. While no formal annual inspection is required, Army Headquarters commanders are required to ensure the health and safety of their Army civilians working in contractor facilities.

e. Formal safety inspections are required using checklists provided by the local Garrison Safety Office. Assistance can also be requested from the Garrison Safety Office to develop a checklist for your organization.

f. These inspections for tenant activities will be conducted in accordance with the host garrison and tenant activity agreement.

g. Collateral duty safety personnel trained, qualified and appointed in accordance with procedures in DA Pam 385–10 may perform these inspections for worksites. Collateral duty safety personnel should conduct their inspections based on mission, risk, and commander's guidance. A qualified safety person, as defined in the glossary, will accompany them on at least one inspection per year to assure quality inspections are being conducted.

h. Personnel conducting these inspections will have access to diagnostic equipment and to personnel necessary to identify, document, and analyze the significance of the hazards discovered during the inspection. Current reference materials pertinent to the worksite, such as standards, regulations, SOPs, hazard analyses/job hazard analysis, risk assessments, materiel safety data sheets, and technical and field manuals, will be readily available.

i. These inspections may be conducted with or without prior notice. No–notice inspections will be used when local safety and health personnel determine they will provide a significantly more meaningful assessment of actual operating conditions and practices. However, appropriate representatives of Army civilian employees and recognized employee organizations will be notified when management receives prior notice of an inspection.

j. A representative of the official in charge of a workplace and an authorized representative of Army civilian employees will be given the opportunity to accompany the inspector during physical inspection of workplaces. Garrison and activity commanders, or their designated representative, may deny the right of accompaniment to any person who, in their judgment, will interfere with the inspection.

k. Follow–up inspections are essential to ensure that hazards are corrected.

l. Safety and occupational health inspections will not be conducted in conjunction with any other visit or inspection.

17–7. Notices of violations

Notices of violations for RACs 1 and 2 hazards detected during Standard Army Safety and Occupational Health Inspections will be recorded on DA Form 4753 (Notice of Unsafe or Unhealthful Working Condition) or equivalent. All posted notices will describe the nature and severity, probability and associated risk of the violation, the substance of the mishap risk management component of CRM plan, and interim protective measures.

a. Copies of each notice of unsafe or unhealthful conditions will be given to the appropriate official in charge of the workplace and any participating employee representative.

b. The official in charge of the workplace where the condition was discovered will post notices. Where it is not practical to post the notice at or near the hazard, it will be posted in a prominent place where all affected personnel will readily see it.

c. Delivery and posting will take place within 15 days of detection for safety violations and 30 days for health violations.

d. The notices will remain posted for 3 working days or until correction, whichever is later.

17–8. Written reports of violations

Written reports of violations resulting from Standard Army Safety Inspections as well as occupational health inspections will be provided to the head of the activity or the commander of the unit inspected. These reports will cite hazards and safety management deficiencies and will recommend corrective actions.

17–9. Army employee hazard reporting

a. Follow the procedures for employee reports of hazards located in 29 CFR 1960.28, 29 CFR 1960.46, and DA Pam 385–10

b. Reports under these procedures will be completed on DA Form 4755 (Report of Alleged Unsafe or Unhealthful Working Conditions) in accordance with DA Pam 385–10.

17–10. Occupational safety and health inspections

a. Inspection of contractor workplaces by Federal and state agencies will be accomplished according to DODI 6055.1 and 29 CFR 1960.

b. Workplace safety inspections and occupational health assessments may be in response to a complaint from an Army employee or employee representative; they may be scheduled as part of OSHA's annual evaluation of agency programs, OSHA target program, or in response to a fatal accident.

c. Federal and state OSH officials will be immediately admitted to conduct inspections at selected workplaces in a reasonable manner during normal working hours.

d. Federal and state OSH officials will initially report to the garrison commander or designated representative and will be accompanied at all times on the Army installation. They will be required to show proof of appropriate security clearance if entry into closed areas is required. A closing conference with the garrison or activity commander or command designee will be arranged before the Federal and state OSH officials departure. Employee representatives will be invited to attend the opening and closing conferences.

e. Upon request, Federal and state OSH officials will be provided available safety and health information on worksites to be visited. Such information may include data on HAZMAT in use, copies of recent DOD inspection or survey reports, accident reports, and abatement project information.

f. When Federal and state OSH officials issue notice of unsafe or unhealthful conditions (OSHA–2H Form), local officials should treat such notices in the same manner as similar internal notices and provide for abatement of significant deficiencies. Garrisons that receive an OSHA –2H will immediately transmit copies through command channels to HQDA, ATTN: DACS–SF, Washington, DC 20310–0300, and copy furnished to Commander, USACRC, ATTN: CSSC–PR, Fort Rucker, AL 36362–5363.

g. Response to OSH inspection reports will originate at the local level. OSHA officials will elevate unresolved conflicts through their channels to DOD. This provision, however, will not inhibit normal internal communication within command channels to apprise higher echelons of the results of OSH inspections and coordination of responses. With respect to investigation of Army accidents, which is solely a DOD responsibility under EO 12196, Federal and state OSH officials may be shown or provided factual portions of pertinent accident investigation reports as outlined in DA Pam 385–40. Federal and state OSH officials, upon request, may also be authorized to accompany Army accident investigators in an observer status. Separate, duplicate OSH investigations of Army accidents, concurrent either with or subsequent to required Army investigations, are not expected. However, Federal and state OSH officials may inspect for residual hazardous conditions at the site of an Army accident.

Chapter 18
Industrial Operational Safety

18–1. Introduction

An effective safety program will improve industrial operational readiness and reduce costs. Industrial operations comprise activities that contribute to the development, testing, procurement, deployment and logistical support of Army equipment and weapon systems. The principles of this chapter will apply to Civil Works.

18–2. Policy

Whenever possible engineering controls will be used to eliminate hazards, and administrative controls will only be used whenever engineering controls are not feasible.

18–3. Acquisition of materials, equipment, facilities, and systems

a. Acquisition of materials, equipment, facilities, and systems will comply with the requirements of chapter 9 of this regulation.

b. The acquisition of materials, equipment, facilities, and systems will maximize the use of engineering design to preclude unnecessary residual risk and control residual risks when design changes to remove risks are not feasible.

18–4. Pre–operational planning

Pre–operational planning will be developed and promulgated as part of the planning for operations. The pre–operational plan will identify hazards that may impact personnel safety and operations and the measures used to eliminate or control them.

a. The mishap risk management component of CRM will be used to identify, and mitigate hazards and manage the associated risk with that activity. This requires that risk assessment, risk decisionmaking and implementation of effective risk controls be part of the pre–operational safety plan. Operational plans will incorporate pre–operation safety briefings and training requirements as part of the plan.

b. Operational briefings and training will address identified hazards and their impact on operations.

18–5. Standing operating procedures

a. Standing operating procedures will be developed for all hazardous operations in accordance with the requirements of DA Pam 385–10 and provide supervisors and operators the level of detail necessary to execute the task or operation in an efficient, effective, and safe manner. Written standards (for example, work plans, internal operating plans, operating manuals, work instructions, FMs, and so forth) may be substituted for SOPs when they provide the level of detail necessary to execute the task or operation in an efficient, effective and safe manner.

b. Standing operating procedures and revisions will be based on the results of a complete composite risk assessment of all phases of the task or operation and resulting recommended controls.

c. Standing operating procedures will describe all necessary operational and safety and health requirements.

d. Standing operating procedures will be reviewed and concurred with by subject matter experts within the executing organization and supporting organizations. At a minimum, SOPs will be reviewed annually or at change of command.

e. Standing operating procedures will address emergency response procedures, required PPE, and equipment required to execute the operation safely.

f. Supervisors will train, observe, and enforce all requirements of the SOP.

g. Supervisors will read and indicate they understand all the requirements of the SOP relative to the operation and that it can be executed in an efficient, effective, and safe manner following the SOP.

h. All employees will read and indicate they understand all the requirements of the SOP relative to their job and can execute it in an efficient, effective, and safe manner following the SOP.

18–6. Accident prevention plans

Supervisors will develop an accident prevention and response plan for each activity under their direct control and administration. Accident prevention plans shall be—

a. Site specific.

b. Available to all personnel, in a common area accessible at all times, all shifts.

c. Current, reflecting up to date procedures, work instructions, and emergency procedures.

d. Trained and practiced with documentary evidence on file identifying trainer, trainee, date trained, date practiced.

e. Include detailed emergency procedures including alert and notification, evacuation and response, personnel accountability, and medical response.

f. Identify known or suspected hazards associated with each particular work instruction, work practice, and operating activity (for example, physical, chemical, biological, and ergonomic).

g. Identify required administrative, engineering, and PPE controls associated with each particular work practice, work instruction, and operating activity.

h. Assign a primary and alternate point of contact for training and provision of documented work instruction, procedure, and/or exposure control equipment.

18–7. Training, licensing, qualification

Supervisors will ensure and make a documented record of review attesting that each employee has sufficient documented training, licensure, qualification, and experience prior to assigning said employee to a particular job or activity. Only licensed, trained personnel are authorized to operate machinery, motor vehicles, watercraft, and MHE.

18–8. Approved/testing equipment and systems

Supervisors and operators will only use equipment and systems approved for testing of Army systems, and verifying the accuracy of industrial processes. Calibration requirements will be in accordance with requirements established by the PM TMDE.

18–9. Pre–operational walk–through

A pre–operational walk–through will be conducted for all hazardous operations to validate the SOP, provide operator training, and to ensure all hazards have been identified during all phases of normal operation and emergencies. They are highly recommended for other long–term operations as well.

18–10. Hazardous material

Hazardous material will be stored in accordance with 29 CFR 1910.101 through 29 CFR 1910.126, Subpart H and NFPA Code 30.

18–11. Personal protective equipment

a. The mishap risk management component of CRM will be used and documented to identify the type of PPE required based on the materials and processes being used.

b. Employees will use PPE in accordance with 29 CFR 1910.132 through 29 CFR 1910.138, Subpart I, as required.

c. Personal protective equipment and training will be provided at no cost to the employee.

18–12. Fire protection

a. Fire protection shall meet the requirements of 29 CFR 1910.155 through 29 CFR 1910.156, Subpart L and the National Fire Codes.

b. Fire protection plans shall be reviewed during the pre–operational planning to ensure that they provide the level of protection necessary to address possible fires in the operation.

18–13. Material handling and storage

a. Supervisors will review all operations to identify where mechanical MHE can be used to eliminate excessive and repetitive manual material handling.

b. Operators will inspect all MHE prior to start of the operations to ensure current certification and that it meets the operation's requirements.

c. Rigger–in–charge will inspect all rigging equipment prior to start of the operations to ensure current certification and that it meets the operation's requirements.

18–14. Machine safeguarding

Supervisors will analyze all equipment to identify point-of-operation hazards and other hazards associated with moving belts and equipment and will provide guards or other means to protect operators and other personnel.

18–15. Exits and egress

Exits and egress will meet the requirements of 29 CFR 1910.33 through 29 CFR 1910.39, Subpart E; fire prevention plans; and The Life Safety Code (NFPA 101).

18–16. Lockout/tagout

The control of hazardous energy (lockout/tagout) shall be developed for each piece of equipment being used and provided to personnel servicing and maintaining that equipment in accordance with 29 CFR 1910.147.

18–17. After action reports

After action reports are a significant part of the Army's process for documenting and sharing lessons learned. After action reports will be used to document all aspects of accident prevention and pre–operational planning associated with industrial operations.

a. The after action report will be a factual statement of what worked or did not work and will contain recommendations for improvement in accident prevention planning for operations.

b. When used in conjunction with documenting an accident, the after action report will identify all factors that

contributed to the accident, including both those that can be controlled (training of personnel, use of proper safety equipment, and so forth) and those beyond direct control (weather, and so forth).

c. Appropriate recommendations shall be included in the after action report.

Chapter 19
Emergency Planning and Response

19–1. Introduction

This chapter prescribes DA safety policy for planning emergency response to save lives; protect the health and safety of the public, responders, and recovery workers; and to exchange information.

19–2. Policy

a. The CRM will be applied to all emergency response scenarios to identify required appropriate equipment and response procedures to increase efficiency and effectiveness. This is to eliminate controlling adverse and risky conditions that will degrade emergency response operations.

b. The National Response Plan and the National Incident Management System contain mechanisms for expedited and proactive Federal, state, local Government support to ensure critical lifesaving assistance and incident containment capabilities are in place to respond quickly and efficiently to catastrophic incidents. The emergency preparedness standards prescribed in these sources as well as executive orders, presidential directives, National Incident Management System, and individual state/territory statutes, will be used together with this regulation to formulate an organization's emergency response plan.

c. In addition, the requirements of 29 CFR 1910.38 and 1910.39 will be complied with.

19–3. Recovered chemical warfare material response

Recovered chemical warfare material response emergency activities will be conducted to protect public and worker safety and health and the environment in accordance with applicable statutes and implementing regulations. Safety planning, coordination with the EPA, state and civilian authorities and responders, and community involvement will be priorities. Recovered chemical warfare material emergency response activities will be conducted in accordance with DA Pam 385–61, the National Oil and Hazardous Substances Pollution Contingency Plan, and the EOD 60–series publications unless actions are part of an approved site–specific emergency response plan.

19–4. Biological warfare material response

Biological warfare material emergency response activities will be conducted to protect public and worker safety and health and the environment in accordance with DA Pam 385–69, applicable statutes and implementing regulations. Safety planning, coordination with the EPA, state and civilian authorities and responders, and community involvement will be priorities.

19–5. Munitions incidents and munitions of concern

Unexploded ordnance emergency response activities will be conducted to protect public and worker safety and health and the environment in accordance with DA Pam 385–10, AR 385–63, DA Pam 385–64, and DA Pam 385–40, applicable statutes and implementing regulations.

a. The commander of an installation or activity first learning of an accident/incident requiring DOD emergency response will immediately notify the AOC, providing all information required in DA Pam 385–10 and DA Pam 385–40 that is known at the time. The telephone numbers for the AOC are DSN 227–0218 or commercial (703) 697–0218.

b. The telephonic response will be promptly confirmed by priority/electronically transmitted message. The AOC message address is HQDA, ATTN: MOCS–AOC, Washington, DC. This message will include the addresses listed in DA Pam 385–10 as information addresses for this notification.

19–6. Concept of operations

a. For those events that rise to the level of an Incident of National Significance, the Department of Homeland Security provides operational and/or resource coordination for Federal support to on–scene incident command structures. The National Response Plan outlines in the National Incident Management System how the Federal Government implements the Robert T. Stafford Disaster Relief and Emergency Assistance Act (The Stafford Act). The Stafford Act outlines how the Federal Government will assist the local and state Governments when a disaster or emergency overwhelms their ability to respond effectively to save lives; protect public health, safety, and property; and restore their communities.

b. The U.S. military is capable of rapidly responding to a broad spectrum of emergencies on short notice. Although the military is generally prohibited from domestic law enforcement, when properly authorized, the military may support Federal, state, and local law enforcement agencies in certain situations. Personnel and associated equipment, although

organized to conduct combat operations, can apply many of their skills to support disaster or emergency assistance operations of short duration. The Command and Control (C2) system inherent in military units provides a significant advantage when deployed in an austere environment created by a catastrophic disaster.

c. All incidents are handled at the lowest possible organizational and jurisdictional level. Police, fire, public health and medical, emergency management, and other personnel are responsible for incident management at the local level. The National Incident Management System provides a consistent nationwide template to enable, Federal, state, local, and tribal Governments and private sector and nongovernmental organizations to work together effectively and efficiently to prepare for, prevent, respond to, and recover from domestic incidents, regardless of cause, size, and complexity to include acts of catastrophic terrorism.

19–7. Chemical, biological, radiological, and nuclear response

a. Facilities in which chemical, biological, radiological and nuclear defense activities are conducted will develop a written plan to safely and adequately respond to emergencies arising from catastrophic incidents.

(1) Plans and their supporting procedures will conform to the requirements stated in Federal, state, and local directives.

(2) A risk assessment will be conducted prior to developing the emergency response plan to ensure that all potential emergency hazards and situations are identified and mitigated. The risk assessment will also consider the types of PPE required and the types of training necessary to use it effectively.

(3) Facility staff will be included in the plan development process to the maximum extent possible to enhance comprehensiveness.

(4) Emergency and security personnel will be trained and equipped to cope with hazards that may be encountered in the performance of their duties.

(5) Training will be sufficient to enable personnel to function without waiting for guidance from supervisors.

b. Reporting will be in accordance with chapter 3 and DA Pam 385–40. Further—

(1) For accidents involving the transportation of nuclear weapons, see AR 50–5.

(2) For accidents involving toxic chemical agents, see AR 50–6.

(3) For accidents involving radioactive and fissionable material, other than weapons, see DA Pam 385–24.

(4) For accidents involving biological agents, see DA Pam 385–69.

(5) For all other types of accidents, see the procedures provided in DA Pam 385–40.

c. Emergency response plans will include the following:

(1) Pre–accident or pre–emergency planning.

(2) Personnel roles, lines of authority, and communications.

(3) Responsibilities and training requirements for emergency responders (for example, supervisors, emergency room coordinator, and emergency response team members).

(4) Emergency alerting and response procedures.

(5) Personal protective equipment and emergency equipment.

(6) Decontamination procedures.

(7) Evacuation routes, procedures, and assembly points.

(8) Procedures to account for employees.

(9) Medical support requirements, emergency medical treatment, and first aid.

(10) Incident facility security requirements.

(11) Procedures for reporting incidents to local, state, and Federal governmental agencies.

(12) Names or job titles of persons or departments to be contacted for further information or explanation of duties under the plan.

(13) Review of response and follow–up.

d. The facility emergency response plan will be reviewed at least annually and, as necessary, be amended to keep current with new or changing facility conditions or information.

e. Installation commanders and local, regional, state, and Federal emergency support and coordinating agencies (for example, law enforcement, fire departments, and health departments) will be informed of chemical, biological, radiological, and nuclear defense activities at Government–owned facilities. Agreements will be made with these agencies to identify and ensure the availability of support, including equipment and training, necessary to provide effective emergency response and to ensure compliance with applicable statutes and regulations and the facility emergency response plan.

(1) Agreements must be in writing.

(2) Agreements will be reviewed annually or upon a change in operations that could affect existing emergency response plans, and updated as necessary.

(3) The emergency response plan will be compatible and integrated with the disaster, fire and/or emergency response plans of the installation and local, state, and Federal agencies.

f. An employee alarm system will be installed in accordance with 29 CFR 1910.165 to notify employees of any necessary emergency action.

g. Emergency response plans will be exercised prior to adoption and at least annually thereafter, to ensure the adequacy of response plans and responder training, responder familiarity with response procedures and equipment, the adequacy of support agreements, and the availability and adequacy of emergency equipment and medical support. Emergency response drills and exercises for biological operations will be conducted in accordance with DA Pam 385–69.

h. If a mishap results in a potential or confirmed exposure or release of a chemical agent, etiologic agent, or exposure or possible exposure to a radiation threat, emergency procedures will be immediately initiated to protect personnel and the environment and to limit the spread of contamination. Hazardous conditions created by the emergency shall be eliminated and the affected areas will be decontaminated before normal operations are resumed. Medical surveillance will be initiated as soon as possible for all individuals present in the potentially affected area at the time of the mishap (see chap 3 for mishap reporting).

i. Standing operating procedures will address emergency procedures related to any mishap involving HAZMAT, including biological program etiologic agents. Notification and evacuation procedures will be covered in detail, as well as measures to contain the HAZMAT and contamination. Local, regional, state, or Federal emergency support and coordinating agencies, such as law enforcement, fire departments, health departments, and Governments will be informed of HAZMAT activities, including biological programs. They will be informed of the appropriate support necessary, to include any equipment and training necessary, to provide effective emergency response and ensure compliance with community "right–to–know" statutes and regulations. Agreements with external agencies must be formalized. If a mishap with a HAZMAT, including a chemical agent or biological program etiologic agent, results in personnel exposure, approved emergency procedures will be immediately initiated to protect personnel and the environment and to confine the HAZMAT and constrain the spread of contamination. All personnel except those responsible for emergency operations will evacuate the immediate area. Special medical surveillance will be started as soon as possible for all workers present in the potentially affected area at the time of the mishap.

j. All activities with a chemical mission, in coordination with the host installation, will establish a central control point to coordinate all chemical agent emergency activities and conduct periodic exercises of the emergency response plans.

19–8. Aviation— emergency planning

a. Commanders of installations with aviation operations will develop a detailed, written, pre-accident or pre-emergency plan specifying duties, responsibilities, and immediate actions for personnel involved in accident notification procedures, search and rescue, accident investigation, and equipment recovery.

b. Installations without aviation safety staff will request assistance from the Regional IMCOM Safety Office.

c. The IMCOM Safety Office will coordinate with aviation units as per local agreements. Commanders will coordinate the support requirement upon receiving the request for support.

Chapter 20
Biological Safety

20–1. Introduction

a. This chapter establishes DA safety policy and procedures for conducting research, development, test, evaluation, and sampling and analysis operations of etiologic agents in permanent or temporary - but not mobile - facilities for biological purposes.

b. Mobile laboratories will develop specific procedures in accordance with this regulation and DA Pam 385–69 to control hazards.

c. DA Pam 385–69 contains minimum technical safety and occupational health requirements for developing management and control processes for biological operations involving etiologic agents and its implementation is mandatory.

d. Best practices collected from both Government and industry that serve as examples of how others have met challenges, introduced innovation and advanced the science of chemical agent safety are documented in best practices pamphlets for information. These practices have been reviewed by subject matter experts designated by the Army Biological Safety and Health Advisory Board for technical and regulatory content.

20–2. Application of composite risk management

The requirements of DA Pam 385–30 are mandatory and shall be applied to this chapter and to DA Pam 385–69.

20–3. General

a. The transport, storage, handling, use, and disposal of etiologic agents will occur in a manner that will not adversely affect the safety and health of employees, visitors, the surrounding community, or the environment. The

overarching principle for safety in biological activities is to minimize the potential exposure of personnel and the environment to etiologic agents. Biological activities will be conducted using the facilities, equipment, and procedures commensurate to the level of risk of the activity or the BSL. Employ the minimum number of appropriately qualified and trained personnel to engage in the activity, for the shortest period of time and with the minimum amount of material, consistent with program objectives and safe operations. At least two qualified personnel will be present during operations or maintenance in containment (BSL–3) or maximum containment (BSL–4) level facilities.

b. The risks associated with biological activities will be assessed and documented and controls established (personnel training and qualification, procedures, containment equipment, and facility design) to contain etiologic agents and to protect workers, support personnel, the environment, and laboratory products.

20–4. Laboratory and field testing of protective equipment or detection devices

a. All testing of protective equipment or detection devices employing etiologic agents will be conducted in appropriate BSL laboratories, chambers, or other facilities. All testing will be conducted using the least hazardous etiologic agent consistent with mission objectives.

b. Field testing (open air) is restricted to the use of etiologic agent stimulants, unless the Secretary of Defense determines that testing is necessary for national security in accordance with 50 USC 1512.

20–5. Biological Safety Programs

Each Army Headquarters, major subordinate command, and agency conducting biological activities will include a biological safety section in their written Safety and Occupational Health Program prescribing responsibilities and procedures for implementing this chapter and DA Pam 385–69. When another military department, command, or agency conducting biological activity is a tenant on an installation, that organization shall coordinate their biological safety program with the installation commander.

20–6. Biological Occupational Health Element

The installation, institute, or activity's Safety and Occupational Health Program will include a biological occupation health element meeting the requirements of DA Pam 385–69.

20–7. Special Immunization Program

a. The Special Immunization Program has been established so that vaccines will be available for providing an additional level of protection to at-risk individuals involved in biological activities. The Special Immunization Program uses licensed and unlicensed vaccines to protect at risk Soldiers and Army civilian employees. Unlicensed vaccines are given under investigational new drug (IND) protocols. The U.S. Army Medical Research and Materiel Command manages the Special Immunization Program.

b. Immunization with a licensed vaccine, or a statement of declination from the individual, may be required as a prerequisite for working with certain biological agents. Due to the investigational, unlicensed status and the limited availability of vaccines given under IND protocols, immunization with an IND vaccine is strictly voluntary and is limited to those individuals to whom the risk of their use has been fully analyzed and justified. Vaccines given under IND protocols are only to be used to provide an additional level of protection, and are not to be used in lieu of safe laboratory practices, agent containment, or PPE.

20–8. Approval of biological facilities

a. The facility safety director will review modifications to a biological facility. For new construction or modifications of Government biological facilities, safety controls will be reviewed for compliance with DA Pam 385–69 by the U.S. Army Center for Health Promotion and Preventive Medicine (USACHPPM) and ODASAF. They will provide comments to the commander/director of the facility.

b. Design documents that detail biological facility safety controls for new construction or major modifications of facilities used in biological activities will be submitted through the chain of command to, HQDA (DACS–SF), 200 Army Pentagon, Washington, D.C. 20310–0200 and Commander, USACHPPM, ATTN: Industrial Hygiene Program 55 (MSHB–TS–OFS), 5158 Blackhawk Road, Aberdeen Proving Ground, MD 21010–5403 for safety review. Design documents will be submitted for both concept and final designs. Design documents will state the approved use of the facility, the proposed change in facility use, as appropriate, and will include a maximum credible event (Worst-Case Risk) and risk analysis for the proposed facility use. Information on the requirements necessitating such renovation, modification, or construction will be submitted through the chain of command to HQDA, (SAAL–ZT), Washington, DC 20310–0103.

c. Prior to initial use, containment (BSL–3) and maximum containment (BSL–4) laboratories will be validated for safe operation through a commissioning survey. The organization conducting the commissioning survey may be in–house or contracted but will be approved by USACHPPM and ODASAF (see DA Pam 385–69 for commissioning survey criteria). Commissioning surveys are in addition to pre–operational surveys.

20–9. Facility pre–operational surveys

a. Prior to start of operations at new biological BSL–1 and BSL–2 facilities or BSL–1 and BSL–2 facilities that have undergone major modification, a pre–operational survey will be completed and approved by the Army Headquarters. The parent Army Headquarters will lead the pre–operational survey. This responsibility may be delegated to a major subordinate command.

b. Prior to start of operations at new biological BSL–3 and BSL–4 facilities or BSL–3 and BSL–4 facilities that have undergone major modification, a pre–operational survey will be completed and approved by the ODASAF.

c. Qualified safety and occupational health professionals will conduct the pre–operational survey to evaluate implementation and effectiveness of the facility's biosafety control–measures and compliance with this regulation and DA Pam 385–69 to include simulation of selected etiologic and emergency response operations.

20–10. Risk assessment

a. A risk assessment will be completed in accordance with this regulation and DA Pam 385–69. The risk assessment will document—

(1) Any proposed biological activity;

(2) All biological operations involving etiologic agents; and,

(3) A change in process or control measures that may increase potential contact with, or concentrations of, biological material.

b. The principal investigator or immediate supervisor (whoever has the best understanding of the activities and risks) is responsible for conducting the risk assessment. This must be done in close coordination with the safety officer and/or safety committee to ensure compliance with established guidelines and regulations.

20–11. Etiologic agent containment

a. Containment equipment will be used, in conjunction with personnel qualification and training and safe work practices and procedures, to minimize potential exposure of personnel and the environment to etiologic agents.

b. Containment will be implemented to the maximum extent feasible and verified as effective. Personal protective clothing and equipment will not be used in lieu of containment and may be used only after containment has been shown unable to provide adequate protection.

c. Biological protocols and SOPs will maximize use of engineering and administrative controls to preclude or minimize the need for PPE.

d. The level and type of PPE required for biological activities will be based on the results of risk assessments and the criteria in DA Pam 385–69. The selection and training for use of PPE will be as specified in DA Pam 385–69.

e. Before beginning any etiologic agent operation, a determination will be made that the hazards associated with the operation are under positive control, as defined in the applicable SOP, and that the operation complies with the criteria of this regulation and DA Pam 385–69.

20–12. Training and information

All personnel who work directly with or who otherwise have a potential for exposure to etiologic agents will receive training in accordance with chapter 10 and DA Pam 385–69.

20–13. Inspections

Government and contract biological activities will be inspected in accordance with the requirements of DA Pam 385–69.

20–14. Standing operating procedures

Standing operating procedures are required for every biological operation using etiologic agents in accordance with this regulation and DA Pam 385–10, and will be readily available at the worksite.

20–15. Labeling and posting of areas containing etiologic agent

Hazard warning signs displaying the universal biohazard symbol will be posted on all access doors to areas containing etiologic agents (see DA Pam 385–69, para 3–8). The hazard warning sign will designate if a biological agent is present. Signs will be covered or removed if the organizational safety officer, biosafety officer, or laboratory supervisor certifies that the agent has been removed and the area has been decontaminated.

20–16. Maintenance controls

A continuing maintenance process will be implemented for equipment and facilities. The maintenance process at a minimum will address:

a. Identifying critical equipment and utility system components;

b. Inspecting, testing, certifying, and maintaining critical equipment and utility system operating components.

c. Investigating, reporting, and correcting equipment and utility system problems, failures, and user errors.

d. Ensuring maintenance personnel possess the necessary knowledge, skills, and qualifications to inspect, test, certify, and maintain critical equipment and utility systems.

e. Responding to equipment and utility system failures or disruptions.

20–17. Transportation of etiologic agents

When transporting etiologic agents, the agent will be prepared for shipment; packaged, labeled, and shipped in accordance with applicable Federal, state, and local laws and regulations, to include DA Pam 385–69 and the following:

a. 7 CFR 331.

b. 9 CFR, Vol 1, Chapter 1, Parts 92, 94, 95, 96, 121, 122, and 130.

c. 15 CFR Vol 2, Chapter VII, Parts 730–774.

d. 42 CFR 71.54.

e. 42 CFR 73.

f. 49 CFR Vol 2, Chapter I.

g. International Air Transport Association Dangerous Goods Regulations.

h. DOD 4500.9–R.

20–18. Disposal controls

Etiologic agents and potentially contaminated waste materials will be decontaminated by approved methods before disposal.

a. The preferred methods of decontamination of etiologic agents are autoclaving or chemical inactivation with appropriate disinfectants (see DA Pam 385–69, chap 5).

b. Etiologic agents awaiting decontamination will be contained at the appropriate BSL.

c. Disposal of infectious or hazardous wastes must not violate Army, Federal, state, local, or HN environmental standards.

20–19. Biological program safety studies and reviews

Safety studies and reviews are conducted to assure that maximum safety and occupational health measures are implemented to prevent mishaps involving etiologic agents. Any HQDA agency may recommend a special study or review of an etiologic agent or system when it becomes necessary to investigate the condition or changes described below. The responsible HQDA agency will determine the scope and conduct the study or review. Special study activities will be coordinated with HQDA (DACS–SF), Washington, DC 20310–0200 and will include an analysis of—

a. Conditions or practices that may affect safety.

b. Major system modifications including both design and physical configuration changes.

c. Significant changes to safety, health, and environmental protection standards and requirements that affect biological operations.

20–20. Contracting

a. The contracting agency will prepare written procedures for reviewing the contractor's capability to perform biological activities safely in accordance with this regulation and DA Pam 385–69. These procedures will describe the criteria and guidelines for preparing the facilities descriptions, safety requirements, special procedures and techniques, inspection procedures, and worst–case risk scenarios. These procedures will be submitted through command channels to the contracting agency's ACOM, ASCC, DRU, or NGB safety office for review and approval.

b. Contractors will comply with the requirements of 32 CFR 627.

Chapter 21
Chemical Agent Safety Management

21–1. Introduction

a. This chapter prescribes DA safety policy and processes for the Army chemical agent safety function.

b. This chapter applies to blister agents H, HD, HT, and L and to nerve agents GA, GB, GD, GF, and VX and other experimental chemical agents exhibiting toxicity similar to nerve and blister agents. This chapter does not apply to commercially available or produced chemicals or to RCWM.

c. DA Pam 385–61 contains technical safety and occupational health requirements for developing management and control processes for operations involving chemical agents and associated weapons systems and its implementation is mandatory. DA Pam 385–61 is a guide for contingency or tactical military operations and not mandatory.

d. Department of the Army Pamphlet 385–61, chapter 12 applies only to chemical agent training at the Chemical Defense Training Facility, at U.S. Army Chemical School, Fort Leonard Wood, MO.

e. Chemical agent waste associated with chemical agent facilities and operations, which does not meet the definition of clean, will be managed, stored, and shipped in accordance with existing laws and regulations to a permitted treatment, storage, disposal facility, whose permit allows receipt of such wastes.

f. The requirements of DA Pam 385–61 do not apply to RDT&E solutions of chemical agents defined in AR 50–6 as RDT&E dilute solutions.

(1) The provisions contained in DA Pam 385–61 should be used as a guide in conjunction with a hazard analysis, SOPs, and good laboratory practices to ensure safe operations with RDT&E solutions.

(2) Each installation or activity conducting RDT&E solution operations must have a program document that describes how these operations will be conducted.

21–2. Applicability

This chapter applies to activities and organizations with a mission involving chemical agents and applies during peacetime, wartime, contingency operations, training, exercises, and RDT&E.

21–3. Application of composite risk management

The requirements of DA Pam 385–30 are mandatory and shall be applied to this chapter and DA Pam 385–61.

21–4. Chemical Demilitarization Program

All aspects of the Chemical Demilitarization Program, including movement of munitions to the treatment facility or system and operation of the treatment facility or system, shall be based on public safety risk considerations instead of maximum credible events or other traditional risk assessment procedures. The Chemical Demilitarization Program uses risk assessment procedures governed by Federal statute, recommended by the Board on Army Science and Technology, and accepted by the Centers for Disease Control and Prevention.

21–5. Chemical agent function

As part of the Army Safety Program when required by an activity's mission, the chemical agent function will consist of management and control processes addressing the following key components in accordance with DA Pam 386–61:

a. Chemical agent air monitoring.

b. Chemical agent engineering controls and facility engineering design.

c. Occupational health.

d. Specialized PPE for chemical agent use.

e. Specialized training for chemical agent operations and support personnel.

f. Special procedures for chemical agent emergency response and preparedness.

g. Chemical agent recordkeeping.

h. Chemical agent transportation.

i. Chemical agent unique decontamination.

j. Special techniques for chemical agent storage.

Chapter 22
Marine Activities

22–1. Introduction

Leaders and managers will use the CRM process to establish and operate an effective Marine Activities safety program to include Water Operations, Water Activities, and Civil Work Marine Activities. Specific requirements for each of these program areas are provided in the following paragraphs.

22–2. Water operations

Operators will follow United States Coast Guard (USCG) and/or USACE guidance for safe operation of non–tactical vessels and watercraft.

22–3. Civil work marine activities

Watercraft, engineer–peculiar equipment, and operations under jurisdiction of the USACE, to include dredging, navigation maintenance, survey, and park ranger waterborne patrol operations shall meet the requirements in EM 385–1–1; ER 385–1–91; and EP 1130–2–500, chapter 7. For vessel design, USACE owned and operated vessels, plant, and equipment shall be of a design accepted by the USACE Marine Design Center, and maintained in a seaworthy state, equipped in accordance with the original design, USCG regulations, and USACE requirements found in EM 385–1–1 and EP 1130–2–500.

22–4. Operator qualification

Operators of non–tactical Army vessels shall be licensed in accordance with AR 600–55 and, where applicable, by the USCG and/or USACE EM 385–1–1 for the specific type of vessel/equipment. Commands may impose more restrictive licensing requirements as needed.

22–5. Protective equipment

a. Personnel aboard non–tactical vessels and floating plants or working on/over water shall wear personal floatation devices as prescribed by USCG, OSHA and/or USACE guidance found in 46 CFR, 29 CFR, and EM 385–1–1 respectively. Personal floatation device use during tactical water operations will be in accordance with mission commander's guidance.

b. Throwable devices (ring buoys, life rings, and so forth) shall be provided on all vessels and floating plants in accordance with the USCG and EM 385–1–1, Section 5.

22–6. Inspections

Qualified personnel shall inspect all vessels and floating plants at least annually for seaworthiness and safe operating condition . Periodic inspections and tests shall assure that a safe operating condition is maintained.

22–7. Pre–accident or pre–emergency planning

Prior to vessel or plant deployment, plans shall be prepared for response to marine emergencies such as fire, sinking, flooding, severe weather, man overboard, and HAZMAT incidents as outlined by USCG guidance and/ or USACE EM 385–1–1 section 19. Drills and exercises of these plans shall be conducted as stated in the guidance.

Chapter 23
Medical Safety

23–1. Introduction

The health care delivery industry requires strenuous activities to include lifting, pulling, sliding, turning of patients, transferring of patients, moving of equipment, and standing for long periods of time. Such requirements create environments conducive to accidents and injuries. This chapter provides—

a. The additional practices and procedures that constitute a safety program in Army medical treatment facilities and supplement other codes, standards, and laws.

b. Guidance for medical commanders, MTF safety personnel, supervisors, and other personnel in the hospital to provide a safe, functional, supportive and effective environment for patients, staff members, and other individuals in the hospital.

23–2. Policy

An effective medical safety program must go beyond the minimum requirements found in the regulations, codes, and standards. Therefore, the requirements of Environment of Care Essentials for Health Care, published by the Joint Commission on Accreditation of Healthcare Organizations (JCAHO) and DA Pam 385–80, are mandatory.

23–3. Army Medical Safety Program Management

a. Medical treatment facilities will comply with the host installation safety program.

b. Accident reporting and recordkeeping procedures and responsibilities for medical treatment facilities safety directors are defined in 29 CFR 1904, chapter 3 of this regulation, and JCAHO environment of care standards.

23–4. Hospital safety

a. The hospital commander has overall responsibility for safety in the MTF/hospital.

(1) A Safety and Occupational Health Advisory Council or an Environment of Care Committee will be organized with representation from the administration, preventive medicine (PVNTMED) service, medical staff, nursing staff, engineering and maintenance, emergency management, security, housekeeping, and nutritional care.

(2) The committee will meet regularly but not less than every other month and keep written minutes of its meetings.

(3) The findings of the committee and appropriate recommended corrective actions will be reported in the committee minutes and all minutes will be signed and approved by the hospital commander.

(4) If the MTF opts to have an Environment of Care Committee then the safety director will be an active member of the installation safety committee and report appropriate items of interest to the MTF at the bimonthly Environment of Care Committee meeting. Additionally, the safety director will convey safety items that the MTF addresses to the installation safety office.

b. The hospital will have written safety policies to include procedures for safety of patients and accident reporting procedures for patients, visitors, and staff.

c. Safety Training.

(1) A safety orientation program will be provided for all new employees.

(2) Ongoing safety education will be provided by the supervisor for all employees and it will be documented.

(3) Educational programs will be developed for specific areas and activities within the hospital.

(4) All employees will be instructed by their supervisors as to the hazards inherent in their jobs and the safety rules pertaining to their specific duties.

(5) Education related to job hazards will be coordinated with Occupational Health personnel, the safety director, and the infection control nurse as appropriate.

d. The hospital will have a written policy that prohibits smoking in the hospital for staff or visitors. An exception may be made for patients in accordance with JCAHO environment of care standard.

23–5. Medical systems safety and health

a. Significant safety and health exposures that are unique to medical treatment facilities can affect patients, visitors, and staff with potentially lethal consequences. The safety director will work with preventive medicine personnel, engineering and maintenance personnel to coordinate the identification and elimination of hazards.

b. Hazards must be identified and abated.

(1) Medical Command facilities will use an automated program that keeps data for the hazard abatement program for medical treatment facilities.

(2) All findings will be entered in the violation inventory log.

(3) Any hazard that cannot be abated within 30 days will automatically have a hazard abatement plan developed along with a plan for improvement.

c. The Environment of Care Committee/Safety and Occupational Health Advisory Council will be briefed on all abatement activities.

23–6. Safety director functions

The Safety Director will perform the following additional functions:

a. Coordinate and manage all aspects of the JCAHO environment of care standards.

b. Perform as the MTF fire marshal.

c. Ensure that the MTF has a Safety and Occupational Advisory Council/ Environment of Care Committee. If the activity elects to have an Environment of Care Committee, the safety manger will be an active member of the host installation Safety and Occupational Health Advisory Council. The agenda will include the following elements;

(1) Accidents/incidents for patients, visitors and staff;

(2) Hazard surveillance (environmental inspections);

(3) Staff training; and

(4) Review of program content.

d. Ensure that management plans are developed for all 7 elements of the Environment of Care standard. The plan/ program will be evaluated annually and submitted to the leadership for review/action.

e. Conduct fire drills for all personnel on all shifts at least quarterly.

(1) When deficiencies are found, training will be conducted on the spot to ensure safety of the patients, visitors, and staff.

(2) Fire drill reports will be completed and submitted to the Safety and Occupational Health Advisory Council / Environment of Care Committee.

f. Conduct hazard surveillance for all areas annually and semiannually for patient care areas. Additionally, conduct quarterly high interest and monthly spot inspections. These inspections will be documented and briefed at the Safety and Occupational Health Advisory Council/Environment of Care Committee.

g. Deficiencies from the inspection will be recorded on DA Form 4754, Violation Inventory Log, and tracked until abated. Hazards that cannot be abated within 30 days will have a hazard abatement plan completed and tracked/ followed up every 30 days until abated.

h. Ensure all MTF personnel receive safety and fire training annually.

i. Document training provided.

Chapter 24
Facility Reuse and Closure

24–1. Introduction

Due to changing unit missions and relocations, it is often necessary to close an installation or a portion of an installation, or reuse a portion of an installation to support new and different missions.

a. This chapter establishes requirements that are necessary to—

(1) Document, identify, evaluate, and, where appropriate, remediate contamination resulting from past Army activities.

(2) Ensure immediate response to discoveries of biological warfare materiel RCWM, and munitions and explosives of concern (MEC) from past DOD activities.

b. This chapter applies when responding to planned and unplanned discoveries of biological warfare materiel, RCWM, and MEC on active DOD installations, on installations awaiting realignment or closure under the Base Realignment and Closure (BRAC) Program and at FUDS where the Army is the executive agent and prior Army installations.

(1) Comply with statutes, regulations, executive orders, and other legal requirements governing personnel and public safety.

(2) Transition no longer needed installations quickly, cost-effectively and efficiently supporting community reinvestment initiatives.

(3) Provide protection for workers, the public, and the environment during biological warfare materiel, MEC, and RCWM response activities and the conduct of response activities in accordance with safety and environmental laws and regulations.

24–2. Policy

a. Preparing for closure or reuse of land.

(1) When closing portions of an installation or reusing, the prior use of the land must be considered to ensure that its use does not endanger future operations, personnel, or the public.

(2) When the DOD decides to close a military base or facility, a decommissioning program will be conducted. The Army will not abandon a facility without developing a comprehensive program and documenting the program in a decommissioning plan that identifies any hazardous sites or waste, including chemical, explosives (radiological and biological) that may be present. Base/facility history and past mission of the facility or base will serve as guides during development of the decommissioning program plan.

b. Recordkeeping of risks.

(1) During operations, a process will be established to maintain records of location and information, such as a material safety data sheet, hazard classifications, and so forth, on all used and stored HAZMAT, such as explosives, chemicals, and so forth.

(2) When facilities or areas undergo remediation, complete records of the actions involving clean up of HAZMAT will be added to the record files.

(3) For each base closing, all risks associated with mitigation of identified hazards will be recorded and tracked until mitigated. An annual risk assessment report of progress and obstacles encountered will be provided to the ASA(I&E). Any hazards discovered that were not included on the original decommissioning plan will be recorded and included in the tracking report. The decommissioning plan will be updated as required.

24–3. Closure requirements

a. Nuclear Regulatory Commission tests. For sites where there is a possibility that radiological contamination may exist, the Nuclear Regulatory Commission will be requested to conduct testing to confirm the presence (or absence) of such contamination. The results of these tests will be included in the decommissioning program plan. Each hazard will be included in the risk assessment report and tracked until resolved.

b. Environmental Protection Agency sampling. Sampling in accordance with the EPA standards will be conducted when suspected contamination exists for hazards normally associated with environmental pollution. The results of this sampling will be documented in the decommissioning program plan. The results of this sampling and risk analysis testing will be documented in the appropriate remedial documents. Identified risk will be recorded in the risk assessment report and tracked until mitigated.

24–4. Munitions and explosives of concern

a. Munitions and explosives of concern sites will be identified along with the type of ordnance or other explosives located within the boundaries of each site. The decommissioning program plan will include information on each site and the type of ammunition or explosives located thereon. All MEC will be handled and processed in accordance with DA Pam 385–64.

b. Disposition of ammunition, explosives, and propellants will be accomplished in accordance with a DDESB approved site plan.

c. The burying or dumping of ammunition, explosives, or propellants is not an approved method of disposal. Exceptions— the covering of military munitions with earth or other material to control fragments, blast, or noise during authorized destruction by detonation; and, the use of capping in–place "in–situ" of MEC when implemented as an engineered remedy under an authorized response action.

d. Agencies executing munitions responses will submit an after action report through USATCES to DDESB. The DDESB Secretariat will raise any issues that require resolution before land transfer or an alternative use can proceed (see DA Pam 385–64, chap 8).

24–5. Recovered chemical warfare material

a. Suspect chemical warfare materiel may be discovered during Army restoration and remediation activities at active installations, BRAC sites, and FUDS. As the DOD executive agent for chemical warfare materiel, the Army is responsible for the safe, timely, and effective response to discoveries of this materiel.

b. For RCWM response activities, safety procedures and standards will be in accordance with this regulation, AR 50–6, and DA Pam 385–61.

c. Recovered substances not meeting the definition of RCWM will be considered and treated as industrial chemicals and/or hazardous waste, not RCWM. Standards for recovery and disposition of such substances shall be in accordance with 29 CFR 1910.120, 40 CFR 260 through 40 CFR 279, and/or 40 CFR 300, and where applicable, equivalent state regulations.

d. The objectives of RCWM response activities are the safe, timely, and effective mitigation of public and environmental health and safety hazards posed by the materiel, in compliance with statutory and regulatory requirements and in coordination with Federal, state, and local authorities.

e. The Army will maintain a database of those locations where RCWM was (or where it was suspected to have been) manufactured, tested, stored, deployed, or disposed.

f. A comprehensive public affairs effort is essential for all RCWM response activities. For these activities, an effective public affairs plan will be initiated as soon as practicable by the lead agency responsible for the site in coordination with all participating organizations (ACOM, ASCC, DRU, CMA, 20th Support Command (Chemical, Biological, Radiological, Nuclear and High Yield Explosives) (20th SUPCOM (CBRNE)), and DA). All communications with the public and the media regarding response activities will be coordinated, shared, and disseminated through appropriate public affairs channels.

g. For emergency response activities, the On Scene Coordinator (OSC) will specify the public affairs responsibilities.

h. For remediation activities on active installations, the ACOM, ASCC, DRU, NGB, or FOA will specify the public affairs responsibilities. For remediation activities on FUDS projects, USACE will specify the public affairs responsibilities.

i. The 20th SUPCOM and the CMA will support public affairs efforts and be intimately involved in the development and release of information to the public dealing with RCWM recovery, transport, and disposal.

j. It is recommended that all Army Public Affairs Offices (PAOs) obtain environmental and health risk communication training to prepare them to conduct basic public involvement activities during a chemical warfare materiel response phase.

k. The unplanned discovery of actual or suspected chemical warfare materiel will be reported by the site custodian per chemical event reporting procedures specified in chapter 11 of AR 50–6.

l. For chemical warfare materiel discovered on military facilities, the installation commander will initiate the required chemical event report.

m. The USACE will initiate chemical event reports for chemical warfare materiel discovered incidental to Defense Environmental Restoration Program projects at FUDS.

n. 20th SUPCOM will initiate the required chemical event reports in situations where custodianship is in doubt.

o. The site custodian will report recovery of actual chemical warfare materiel to the National Inventory Control Point for reporting under applicable treaties.

24–6. Contaminated structures

DA/DOD structures in which operations or research activities involving chemical agents, toxic industrial chemicals, biological warfare agents, ammunition, explosives, nuclear reactors, and/or radioisotopes were conducted, will sample, assess, mitigate, clear, and archive actions taken to correct hazardous conditions in accordance with DOD 6055.9–STD, DA Pam 385–24, DA Pam 385–61, and DA Pam 385–64.

Appendix A
References

Section I
Required Publications

AR 385–63
Range Safety (Cited in paras 1–4a(3)(l), 5–2, 19–5.)

DA PAM 385–10
Army Safety Program (Cited in paras 1–4b(12)(n), 1–5l, 2–1, 2–2, 2–3, 2–6b, 2–7j, 2–9, 2–10, 2–11a, 2–17a(4), 6–6, 6–10, 8–3, 10–10, 15–10a, 16–1, 17–2, 17–6g, 17–6a, 17–9b, 18–5a, 19–5, 20–14.)

DA PAM 385–16
System Safety Management Guide (Cited in paras 1–4b(22), 4–8, 9–4, 9–5, 9–9g, 9–9c, 9–11, 9–12, 9–13.)

DA PAM 385–24
The Army Radiation Safety Program (Cited in paras 3–2, 3–6, 3–8b, 3–14a, 3–30, 3–31, 15–10d, 16–1, 19–5, 19–7b.)

DA PAM 385–40
Army Accident Investigation and Reporting (Cited in paras 3–2, 3–6, 3–8b, 3–14a, 3–30, 3–31, 15–10d, 16–1, 19–5, 19–7b.)

DA PAM 385–61
Toxic Chemical Agent Safety Standards (Cited in paras 1–4b(9)(m), 1–4b(15)(m), 2–20b, 4–2c, 10–10c, 21–1f, 21–1d, 21–1c, 21–3, 24–6b.)

DA PAM 385–64
Ammunition and Explosives Safety Standards (Cited in paras 1–4b(9)(m), 2–21b, 4–2c, 5–3, 5–4, 5–7d, 5–7a, 10–10b, 14–4e, 19–5, 24–5d, 24–5a.)

DA PAM 385–65
Explosives/Toxic Chemical Safety Site Planning (Cited in paras 2–21b, 4–2c, 5–6d.)

DA PAM 385–69
Biological Defense Safety Program (Cited in paras 2–19b, 4–2d, 10–10d, 14–15a, 19–4, 19–7g(2), 19–7b(4), 20–1c, 20–2, 20–5, 20–6, 20–8c, 20–8a, 20–9c, 20–10a, 20–11e, 20–11d, 20–12, 20–13, 20–15, 20–17, 20–18, 20–20.)

DA PAM 385–80
Hospital/Medical Safety Management (Cited in para 23–2.)

Section II
Related Publications

A related publication is a source of additional information. The user does not have to read it to understand this publication.

AR 11–34
The Army Respiratory Protection Program

AR 15–6
Procedures for Investigating Officers and Boards of Officers

AR 20–1
Inspector General Activities and Procedures

AR 27–20
Claims

AR 40–5
Preventive Medicine

AR 40–8
Temporary Flying Restrictions Due to Exogenous Factors

AR 40–10
Health Hazard Assessment Program in Support of the Army Material Acquisition Decision Process

AR 40–13
Medical Support–Nuclear/Chemical Accidents and Incidents

AR 40–21
Medical Aspects of Army Aircraft Accident Investigation

AR 40–57
Armed Forces Medical Examiner System

AR 40–66
Medical Record Administration and Health Care Documentation

AR 40–400
Patient Administration

AR 40–501
Standards of Medical Fitness

AR 50–5
Nuclear Surety

AR 50–6
Chemical Surety

AR 50–7
Army Reactor Program

AR 58–1
Management, Acquisition, and Use of Motor Vehicles

AR 70–1
Army Acquisition Policy

AR 70–62
Airworthiness Qualification of U.S. Army Aircraft Systems

AR 73–1
Test and Evaluation Policy

AR 75–1
Malfunctions Involving Ammunition and Explosives (RCS CSGLD–1961 (MI))

AR 95–1
Flight Regulations

AR 95–30
Participation in a Military or Civil Aircraft Accident Safety Investigation

AR 190–5
Motor Vehicle Traffic Supervision

AR 200–1
Environmental Protection and Enhancement

AR 200–2
Environmental Effects of Army Actions

AR 350–1
Army Training and Leader Development

AR 360–1
The Public Affairs Program

AR 385–55
Prevention of Motor Vehicle Accidents

AR 385–63
Range Safety

AR 405–10
Acquisition of Real Property and Interests Therein

AR 420–90
Fire and Emergency Services

AR 525–1
The Department of the Army Command and Control System (DACCS)

AR 600–3
The Army Personnel Proponent System

AR 600–55
The Army Driver and Operator Standardization Program (Selection, Training, Testing, and Licensing)

AR 600–105
Aviation Service of Rated Army Officers

AR 672–74
Army Accident Prevention Awards Program

AR 690–11
Use and Management of Civilian Personnel in Support of Military Contingency Operations

AR 750–1
Army Materiel Maintenance Policy

AR 750–6
Army Equipment Safety and Maintenance Notification System

AR 750–10
Army Modification Program

AR 750–43
Army Test, Measurement, and Diagnostic Equipment

Code of Federal Regulation (CFR)
Available from (http://www.gpoaccess.gov/cfr/index.html.)

7 CFR
Agriculture

9 CFR
Animals and Animal Products

10 CFR
Energy

15 CFR
Commerce and Foreign Trade

29 CFR 1910.38
Emergency Action Plans

29 CFR 1910.39
Fire Prevention Plans

29 CFR 1910.120
Hazardous waste operations and emergency response

29 CFR 1910.147
29 CFR 1910.147, the Control of Hazardous Energy (Lockout/Tagout)–Inspection Procedures and Interpretive Guidance

29 CFR 1910.165
Employee alarm systems

29 CFR 1910, Subpart E
Exit Routes, Emergency Action Plans, and Fire Prevention Plans

29 CFR 1910, Subpart H
Hazardous Materials

29 CFR 1910, Subpart I
Personal Protective Equipment

29 CFR 1910, Subpart L
Fire Protection

32 CFR
National Defense

36 CFR, Chapter III
Parks, Forests, and Public Property

39 CFR
Postal Service

40 CFR
Protection of Environment

42 CFR
Public Health

48 CFR
Federal Acquisition Regulations System

49 CFR
Transportation

DA PAM 25–40
Army Publishing: Action Officers Guide

DA PAM 40–8
Occupational Health Guidelines for the Evaluation and Control of Occupational Exposure to Nerve Agents GA, GB, GD, and VX

DA PAM 40–11
Preventive Medicine

DA PAM 40–18
Personnel Dosimetry Guidance and Dose Recording Procedures for Personnel Occupationally Exposed to Ionizing Radiation

DA PAM 40–173
Occupational Health Guidelines for the Evaluation and Control of Occupational Exposure to Mustard Agents H, HD, and HT

DA PAM 40–501
Hearing Conservation Program

DA PAM 50–5
Nuclear Accident or Incident Response and Assistance (NAIRA) Operations

DA PAM 385–1
Small Unit Safety Officer/NCO Guide

DA PAM 385–63
Range Safety

DA PAM 385–90
Army Aviation Accident Prevention Program

DA PAM 690–43
A Supervisors Guide to Career Development and Counseling for Career Program Employees

DA PAM 690–47
DA Civilian Employee Deployment Guide

DA PAM 738–751
Functional Users Manual for the Army Maintenance Management System–Aviation (TAMMS–A)

DA PAM 750–8
The Army Maintenance Management System (TAMMS) Users Manual

DOD 4145.26–M
DOD Contractors' Safety Manual for Ammunition and Explosives

DOD 4500.36–R
Management Acquisition and Use of Motor Vehicles

DOD 4500.9.R Part II
Defense Transportation Regulation-Cargo Movement

DOD 6055.9
DOD Ammunition and Explosives Safety Standards

DODD 4715.12
Environmental and Explosive Safety Management on Operational Ranges Outside the United States

DODD 6055.9E
DOD Explosives Safety Management and the DOD Explosives Safety Board

DODI 5000.2
Operation of the Defense Acquisition System

DODI 6055.1
DOD Safety & Occupational Health (SOH) Program

DODI 6055.4
DOD Traffic Safety Program

DODI 6055.7
Accident Investigation, Reporting, and Record Keeping

DODI 6055.11
Protection of DOD Personnel from Exposure to Radiofrequency Radiation and Military Exempt Lasers, Ch1

DODI 6055.15
DOD Laser Protection Program

DOT 218
Federal Motor Vehicle Safety Standards and Regulations

Domestic Mail Manual
(Available at http://www.usps.com/welcome.htm.)

EM (Engineer Manual) 385–1–1
USACE Title: Safety–Safety Health Requirements (Army Construction Safety Standards) (Available at http://www.usace.Army.mil/publications/.)

EP (Engineer Pamphlet) 1130–2–500
Project Operations-Partners and Support (Work Management Guidance and Procedures) (Available at http://www.usace.Army.mil/publications/.)

ER 385–1–91
U.S. Army Corps of Engineers Safety and Occupational Health EM 385 Safety and Health Requirements Manual

EO (Executive Order) 12196
Federal Civilian Personnel (Occupational Safety and Health Programs for Federal Employees) (Available from http://www.archives.gov/.)

EO (Executive Order) 13043
Increasing Seat Belt Use in the United States

FAR (Federal Acquisition Regulation) 52.236–13
Accident Prevention (Available from http://www.arnet.gov/far/.)

FECA (Federal Employees’ Compensation Act)
(Available at U.S. Department of Labor, Worker's Compensation http://www.dol.gov/esa/.)

FM 3–0
Operations

FM 4–01.011
Unit Movement Operations

FM 5–0
Army Planning and Orders Preparation

FM 5–19
Composite Risk Management

FM 10–67–1
Concepts and Equipment of Petroleum Operations

FM 21–20
Physical Fitness Training

FM 21–60
Visual Signals

FM 21–305
Manual for the Wheeled Vehicle Driver

FM 55 (Series)
Transportation

FM 55–30
Army Motors Transport Units and Operations

HSPG (Highway Safety Program Guidelines) Number 1, 4, 8, 20
(Available at http://www.nhtsa.dot.gov)

IATA (International Air Transport Association)
Dangerous Goods Regulations, Restricted Articles Tariff 6–D, 47th Edition. (Available at http://www.iata.org/index.htm.)

Joint Commission on Accreditation of Healthcare Organizations (JCAHO)
(Available at http://www.jcaho.org/.)

Joint Publication 3–11
Joint Doctrine for Operations in Nuclear, Biological, and Chemical (NBC) Environments. Available from (Available at http://www.dtic.mil/doctrine/.)

Leader
(Available at https://crc.army.mil.)

MIL–HNBK–828A
Laser Range Safety in Ranges and in Other Outdoor Areas (Available at http://assist.daps.dla.mil/quicksearch.)

MIL STD 882D
System Safety (Available at http://www.assist.daps.dla.mil/quicksearch.)

MIL–STD–1180B(1) (Chg Notice 1)
Safety Standards for Military Ground Vehicles

NFPA 101
Life Safety Code (National Fire Protection Code)

NIMS (National Incident Management System)
(Available at http://www.fema.gov/.)

NIOSH (National Institute for Occupational Safety and Health)
(Available at http://www.cdc.gov/niosh/homepage.html.)

NRP (National Response Plan)
(Available at http://www.dhs.gov/xprepresp/publications/.)

OSHAct (Occupational Safety and Health Act of 1970) Web site
(Available at http://www.osha.gov/.)

PD TMDE Web site
Product Director Test, Measurement, and Diagnostic Equipment (Available at http://www.redstone.Army.mil/.)

PL (Public Law) 91–596
Occupational Safety and Health Act, Amended 5 November 1990 (Available at http://www.labtrain.noaa.gov/.)

PL (Public Law) 106–390)
Robert T. Stafford Disaster Relief and Emergency Assistance Act, 30 October 2000

TB 9–639
Passenger–Carrying Capacity of Tactical and Administrative Vehicles Commonly Used to Transport Personnel

TB 43–0108
Handling, Storage and Disposal of Army Aircraft Components Containing Radioactive Materials

TB 700–2
Department of Defense Ammunition and Explosives Hazard Classification Procedures

TB 750–25
Maintenance of Supplies and Equipment: Army Test, Measurement and Diagnostic Equipment (TMDE) Calibration and Repair Support (C&RS) Program

TB Med 521
Occupational and Environmental Health Management and Control of Diagnostic, Therapeutic, and Medical Research X–ray Systems and Facilities

TB Med 524
Occupational and Environmental Health: Control of Hazards to Health from Laser Radiation

TB Med 575
Swimming Pools and Bathing Facilities

TC 21–306
Tracked Combat Vehicle Driver Training

TED 8.4
OSHA VPP Policy and Procedures Manual. (Available from http://osha.gov.)

The International Civil Aviation Organization (ICAO) Web site
(Available at http://www.icao.int.)

The Life Safety Code 1910.35
NFPA 101–2000, Title: Occupational Safety and Health Standards

TM 55
Transportability

TM 55–607
Loading and Stowage of Military Ammunition and Explosives Aboard Breakbulk Merchant Ships

TM 9–2610–200–14
Operators, Unit, Direct Support, and General Support Maintenance Manual for Care, Maintenance, Repair, and Inspection of Pneumatic Tires and Inner Tubes

UFGS 01525 (Unified Facilities Guide Specifications)
Safety & Occupational Health Requirements (Available at http://www.wbdg.org/.)

USMC Range Safety Pocket Guide
Available from (http://www.pendleton.usmc.mil/.)

50 USC 1512
War and National Defense

UCMJ, Art. 92
Failure to obey order or regulation

56 FR 15510
Roof Crush Resistance, Federal Register (Available at http://www.nhtsa.dot.gov/cars/rules/.)

ANSI (American National Standards Institute) Safety Code N13.30
Performance Criteria for Radio Bioassay (May be purchased online http://www.ansi.org.)

ANSI (American National Standards Institute) Safety Code Z136.1

ANSI (American National Standards Institute) Safety Code Z87.1
Practice for Occupational and Educational Eye and Face Protection

Section III
Prescribed Forms

DA Forms are available on the Army Publishing Directorate Web site http://www.apd.army.mil. SFs and OFs are available on the GSA Web site (http://www.gsa.gov). OSHA Forms are available on the OSHA Web site (http://www.osha.gov).

DA Form 2696
Operational Hazard Report (Cited in para 15–6.)

DA Form 7305
Telephonic Notification of Aviation Accident/Incident (Cited in para 3–8*a*(2)(b).)

DA Form 7306
Worksheet for Telephonic Notification of Ground Accident (Cited in para 3–8*a*(2)(a).)

SF Form 91
Motor Vehicle Accident Report (Cited in para 3–8*b*(4)(d).)

Section IV
Referenced Forms

DA Forms are available on the Army Publishing Directorate Web site (http://www.apd.army.mil); DD Forms are available on the OSD Web site (http://www.dtic.mil/whs/directives/infomgt/forms/formsprogram.htm). SFs and OFs are available on the GSA Web site (http://www.gsa.gov). OSHA Forms are available on the OSHA Web site (http://www.osha.gov).

DA Form 11–2–R
Management Control Evaluation Certification Statement (LRA)

DA Form 1119–1
Certification of Achievement in Safety

DA Form 2028
Recommended Changes to Publications & Blank Forms

DA Form 2397–AB–R
Abbreviated Aviation Accident Report (AAAR)

DA Form 3946
Military Police Traffic Accident Report

DA Form 4753
Notice of Unsafe or Unhealthful Working Condition

DA Form 4754
Violation Inventory Log

DA Form 4755
Employee Report of Alleged Unsafe or Unhealthful Working Conditions

DA Form 5984–E
Operator's Permit Record (EGA). Sample of ULLS–generated form available from (DA Pam 750–8, The Army Maintenance Management System (TAMMIS) Users Manual.)

DA Form 7566
Composite Risk Management Worksheet

DD Form 250
Material Inspection and Receiving Report

DD Form 836
Dangerous Goods Shipping Paper/Declaration and Emergency Response Information for Hazardous Materials Transported by Government Vehicles

DD Form 1391
FY __, Military Construction Project Data

DD Form 2272
Department of Defense Safety and Occupational Health Protection Program

DD Form 2796
Post–Deployment Health Assessment

OF Form 346
U.S. Government Motor Vehicle Operator's Identification Card

SF Form 50–B
Notification of Personnel Action

SF Form 368
Product Quality Deficiency Report

OSHA Form 300
Log of Work–Related Injuries and Illnesses

OSHA Form 300A
Summary of Work–Related Injuries and Illnesses

Appendix B
Determining if a Radiation Safety Function is Required

B–1. Requirements
If any of the conditions in B2, below, pertain to a garrison activity or tenant activities, the garrison is required to execute the requirements of a radiation safety function, which includes designating, in writing, a RSO who will establish, maintain and manage a written Radiation Program in accordance with this regulation, Army, DOD, Federal and state regulations.

B–2. Conditions requiring a radiation safety element
A radiation function is required if the garrison or tenant activity has—

a. A Nuclear Regulatory Commission license, Army reactor permit, ARA, or an applicable technical publication that requires the function.

b. Any personnel in the command who are required to wear ADC–issued dosimetry.

c. Any personnel in the command who are required to participate in a bioassay program.

d. A class IIIb or class IV laser system (section 1.3, ANSI Safety Code Z136.1) that is not type classified. (In this case, the title of the person so designated is "laser safety officer.")

e. A deployable unit possessing radioactive commodities or radiation emitting equipment that requires the implementation of a radiation safety program (for example, leak testing, radiation postings, shipping requirements).

f. Any x–ray systems, except for small, security type x–ray (for example, airport x–ray security machines, mail screening systems).

g. Any x–ray systems meeting the conditions of TB Med 521, ANSI, or National Council on Radiation Protection and Measurements standards.

h. A non–Army agency using, storing, or possessing ionizing radiation sources on an Army installation requires the issuance of a radiation license.

Appendix C
Management Control Evaluation Checklist

C–1. Function

The function covered by this checklist is the Army Safety Program.

C–2. Purpose

The purpose of this checklist is to assist commanders in evaluating the key management controls outlined below. It is not intended to cover all controls.

C–3. Instruction

Answers must be based on the actual testing of key management controls (for example, document analysis, direct observation, sampling, simulation). Answers that indicate deficiencies must be explained and corrective action indicated in supporting documentation. These key management controls must be formally evaluated at least once every 5 years. Certification that this evaluation has been conducted must be accomplished on DA Form 11–2–R (Management Control Evaluation Certification Statement).

C–4. Test questions

Questions for key management controls are as follows:

a. Has each responsible organization established policies and procedures to execute their responsibilities and are they in compliance with their policies and procedures?

b. Have rating elements measuring application and use of CRM and health and safety responsibilities been included in all Officer Evaluation Reports and Enlisted Evaluation Reports for military leaders as well as Army Civilian Employee Performance Appraisals for civilian managers and supervisors?

c. Has a written safety program, providing policy and procedures, been developed which incorporates the various elements based upon the organization's mission?

d. Has a safety and occupational health manager been designated in writing to exercise staff supervision over the safety and occupational health program?

e. Does the designated safety and occupational health manager have direct access to the command or director?

f. Are the various safety and occupational health safety councils, boards and committees meeting as required?

g. Have strategic goals, objectives and planning been executed and a business plan developed to implement them?

h. Have formal agreements been developed with tenant organizations as necessary?

i. Have command integrating agents developed and implemented plans and programs to integrate CRM into their functional area of responsibility?

j. Have both quantitative and qualitative metrics been developed and are they being used to measure their safety program effectiveness?

k. Do command safety and health managers meet OPM standards for the position of Occupational Safety and Health Manager?

l. Has the command requested, obtained, and designated sufficient funds and other resources to carry out all responsibilities designated in this regulation?

m. Are safety offices conducting and documenting annual programmatic audits of their safety program execution using their performance indicators and matrices?

n. Is each level of command auditing each of their subordinate organizations' safety program execution using their performance indicators and matrices at least every 3 years?

o. Are procedures in place and in operation to determine if facilities and equipment meet or exceed safety and health standards established in pertinent host Government, Federal, state, and local statutes and regulations and in Army Regulations?

p. Are deficiencies abated?

q. Are practices and procedures that minimize accident risk incorporated into regulations, directives, SOPs, special orders, training plans, operations plans and SOPs developed for all operations?

r. Are commanders, supervisors, and safety and occupational health staff provided specialized training to enable them to properly execute their safety and occupational health leadership and staff responsibilities?

s. Are there specific plans to ensure continuity of safety and occupational health and the risk management process during tactical operations or mobilization?

t. Is there a program or policy for reporting unsafe or unhealthful conditions?

u. Are standard Army Safety and Occupational Health Inspections performed to evaluate the status of the safety and occupational health program and risk management integration?

v. Are accidents being reported as required and correctly?

C–5. Comments

Help make this a better test for evaluating management controls. Submit comments to the Office of the Director of the Army Safety: Chief of Staff (DACS–SF), 200 Army Pentagon, Washington, DC 20310–0200.

Glossary

Section I
Abbreviations

A&E
ammunition and explosive

ACOM
Army Command

ACV
Army combat vehicle

ADC
Army Dosimetry Center

ADSC
Additional Duty Safety Course

AGR
Active Guard Reserve

AMC
U.S. Army Materiel Command

AMEDD
U.S. Army Medical Department

AMV
Army motor vehicle

ANSI
American National Standards Institute

AOC
Army Operations Center

ARA
Army radiation authorization

ARFOR
Army Forces

ASAD
Army Safety Augmentation Detachment

ASA(ALT)
Assistant Secretary of the Army (Acquisition, Logistics, and Technology)

ASA(I&E)
Assistant Secretary of the Army (Installations and Environment)

ASAT
Army Safety Action Team

ASCC
Army Service Component Command

ACSIM
Assistant Chief of Staff for Installation Management

ACTEDS
Army Civilian Training, Education, and Development System

AFIP
Armed Forces Institute of Pathology

AR
Army regulation

ARNG
Army National Guard

ARSOF
Army Special Operations Forces

ASMIS
Army Safety Management Information System

ASO
aviation safety officer

ATEC
Army Test and Evaluation Command

ATV
all–terrain vehicle

BRAC
base realignment and closure

BRC
Basic Rider Course

BSL
biosafety level

CAI
centralized accident investigation

CCR
Certificate of Compelling Reason

CD
compact disk

CFR
Code of Federal Regulations

CG
commanding general

CID
Criminal Investigation Division

CMA
U.S. Army Chemical Materials Agency

COTS
commercial off–the–shelf

CPSC
Consumer Product Safety Commission

CRM
composite risk management

CSA
Chief of Staff, U.S. Army

CSC
Command Safety Council

CVC
combat vehicle crewman

DA
Department of the Army

DABSHC
Department of the Army Biological Safety and Health Council

DACASC
Department of the Army Chemical Agent Safety Coucil

DA Pam
Department of the Army Pamphlet

DAS
Director, Army Staff

DARSC
Department of the Army Radiation Safety Council

DASA (ESOH)
Deputy Assistant Secretary of the Army (Environmental Safety and Occupational Health)

DASOHAC
Department of the Army Safety and Occupation Health Advisory Council

DCS
Deputy Chief of Staff

DDESB
Department of Defense Explosives Safety Board

DOD
Department of Defense

DODD
Department of Defense Directive

DODI
Department of Defense Instruction

DOT
Department of Transportation

DRU
direct reporting unit

DSN
Defense Service Network

DTC
U.S. Army Developmental Test Command

EIR
equipment improvement report

EOD
explosive ordnance disposal

EPA
Environmental Protection Agency

ERC
Experienced Rider Course

ESC
Enlisted Safety Council

FAR
Federal Acquisition Regulation

FASS
facilities systems safety

FM
Field Manual

FOA
field operating agency

FOIA
Freedom of Information Act

FORSCOM
U.S. Army Forces Command

FUDS
formerly used defense sites

GCMCA
general court–martial convening authority

GFE
government furnished equipment

GFP
government furnished property

GFM
government furnished material

GS
General Schedule

GSNS
Ground Safety Notification System

HAZMAT
hazardous material

HHS
U.S. Department of Health and Human Services

HN
host nation

HQDA
Headquarters, Department of the Army

HSPG
Highway Safety Program Guidelines

IAI
installation–level accident investigation

IMCOM
U.S. Army Installation Management Command

IND
investigational new drug

JCAHO
Joint Commission on Accreditation of Healthcare Organizations

MANPRINT
manpower and personnel integration

MDR
milestone decision review

MEC
munitions and explosives of concern

MEDCOM
U.S. Army Medical Command

MHE
material handling equipment

MIL–STD
military standard

mg
milligram

mL
milliliter

MOS
military occupational specialty

MP
military police

MSF
Motorcycle Safety Foundation

MTF
medical treatment facility

NARM
naturally occurring/accelerator produced radioactive material

NAVFAC
Naval facility

NCO
noncommissioned officer

NDI
non–developmental item

NGB
National Guard Bureau

OCONUS
outside the continental United States

ODASAF
Office of the Director of Army Safety

OF
Optional Form

OPM
Office of Personnel Management

OSH
Occupational Safety and Health

OSHA
Occupational Safety and Health Administration

OSHAct
Occupational Safety and Health Act (of 1970)

PCS
permanent change of station

PEO, Ammo
Program Executive Office, Ammunition

PL
Public Law

PM
program/project/product manager

POV
privately owned vehicle

PPE
personal protective equipment

QA
quality assurance

RAC
risk assessment code

RCWM
recovered chemical warfare materiel

RDT&E
research, development, test, and evaluation

RFP
Request for Proposal

ROTC
Reserve Officers' Training Corps

RSC
Radiation Safety Committee

RSO
radiation safety officer

SA
Secretary of the Army

SDDC
Military Surface Deployment and Distribution Command

SF
Standard Form

SJA
Staff Judge Advocate

SOFA
Status of Forces Agreement

SOP
standing operating procedure

SSMP
system safety management plan

SSPP
system safety program plan

SSRA
system safety risk assessment

TACOM
Tank–Automotive and Armaments Command

TB
technical bulletin

TC
track commander

TDA
tables of distribution and allowances

TDY
temporary duty

TIG
The Inspector General

TMDE
test, measurement, and diagnostic equipment

TM
technical manual

TOE
table of organization and equipment

TRADOC
U.S. Army Training and Doctrine Command

TSG
The Surgeon General

UFGS
Unified Facilities Guide Specifications

UAS
unmanned aircraft system

USACE
U.S. Army Corps of Engineers

USACHPPM
U.S. Army Center for Health Promotion and Preventive Medicine

USACRC
U.S. Army Combat Readiness Center

USAR
U.S. Army Reserve

USARC
U.S. Army Reserve Command

USASOC
U.S. Army Special Operations Command

USATCES
U.S. Army Technical Center for Explosives Safety

USCG
U.S. Coast Guard

VC
vehicle commander

VPP
Voluntary Protection Program

Section II
Terms

Accident
Any unplanned event or series of events that result in death, injury, or illness to personnel, or damage to or loss of equipment or property. (Within the context of this regulation, accident is synonymous with mishap.)

Accident–based risk management
A component of CRM used to identify, evaluate, manage and prevent accidents to personnel, equipment, and the environment during peacetime, contingency operations and wartime due to safety and occupational health factors; design and construction of equipment and other accident-based factors.

Active Army personnel
Members of the Army who are on full–time duty in active military service, including cadets at the U.S. Military Academy.

Aircraft
Free balloons, gliders, airships, and flying machines, whether manned or unmanned, weight carrying structure for navigation of the air that is supported by its own buoyancy or the dynamic action of the air against its surfaces.

Aircraft ground accident
Injury or property damage accidents involving Army aircraft in which no intent for flight exists, and the engine(s) is/are in operation.

Ammunition and explosives
Includes (but is not limited to) all items of ammunition ; propellants, liquid and solid; high and low explosives; guided missiles; warheads; devices; pyrotechnics; chemical agents; and components and substances associated therewith, presenting real or potential hazards to life and property.

Annual Basis or Annually
Annual basis or annually should be from the month of the current year to the same month of the following year. However, the time will not exceed 13 months. This does not apply to items covered under the Army Maintenance Management System.

Army Acquisition Executive
Principal advisor and staff assistant to the SA for acquisition of Army systems.

Army accident
An Army accident is an accident that results in injury or illness to either Army or Non–Army personnel, and/or damage to Army or non–Army property, as a result of Army operations caused by the Army

Occupational illness to military or Army civilian personnel
Injury to on–duty Army civilian personnel. Army military on–duty or off–duty.

Damage to Army property
Damage to public or private property, and/or injury or illness to non–Army personnel caused by Army operations (the Army had a causal or contributing role in the accident).

Army civilian personnel
All DA civil service employees including but not limited to Army National Guard and Army Reserve technicians; foreign nationals directly or indirectly employed by DA; nonappropriated fund employees (excluding part–time military); and others as may be necessary to meet the intent of the regulation.

Army leadership
Army leadership refers to Army officers, NCOs, Senior Executive Service officials, and GS employees designated, authorized, held responsible and accountable by the Army to make decisions at various levels of the Army involving execution of the Army's mission. Designation must be documented in writing or contained in official orders.

Army motor vehicle
Any vehicle that is owned, leased, or rented by DA and/or Reserve Components. A vehicle that is primarily designed

for over–the–road operation. A vehicle whose general purpose is the transportation of cargo or personnel. Examples are passenger cars, station wagons, trucks, ambulances, buses, motorcycles, fire trucks, and refueling vehicles.

Army National Guard personnel
Military personnel who are on active duty for training; inactive duty training; annual training; active duty special work; temporary tour active duty; AGR; full–time manning.

Army personnel
Active duty Army personnel, Army civilian personnel, Army Reserve personnel, Army National Guard personnel, and ROTC personnel as defined in this regulation.

Army property
Any item of Army property, or property leased by the Army for which the Army has assumed risk of loss, such as aircraft, vehicle, building, structure, system, and so on.

Army Reserve personnel
Army Reserve personnel members who are on active duty for training; inactive duty training; annual training; full–time manning; temporary tour active duty; active duty for special work; AGR.

Army CRM process
A holistic approach to preserving readiness that applies 24/7 to Soldiers, Army civilian employees, and even contract workers. The process has 5 phases that form a closed loop system of risk assessment, mitigation, and evaluation.

Army Special Operations Forces (ARSOF)
Those active and Reserve Component ARFOR designated by the Secretary of Defense that are specifically organized, trained, and equipped to conduct and support special operations.

Audit
A process of collecting information about an organization's safety and occupational health management system and making judgments about its adequacy and performance, identifying both the strengths and weaknesses of the safety and health program as implemented by the organization. To ensure that all necessary safety and health program elements are operating and that procedures are in place for thorough implementation. The aims of auditing should be to establish that: appropriate management arrangements are in place; an adequate CRM control system exists which both reflect the hazard profile of the organization and is properly implemented; and appropriate workplace precautions are in place.

Bailed aircraft
Any Government–owned aircraft provided to a contractor under a Bailment Agreement for use in conjunction with a specific contractual requirement. Aircraft are usually bailed to a contractor to perform Government contract work. Aircraft are usually leased to a contractor for the contractor's use. Bailment agreements are legal contracts between the Government Program Office and the contractor.

Bailment contract or agreement
An agreement for the delivery of personal property as opposed to real property in trust for a specific purpose, to be returned when the specific purpose is accomplished.

Barrier
A permanent or temporary impediment to foot and or vehicular traffic that personnel are prohibited to pass without approval from range control. A barrier may be sentinel, wire fencing, gate, sign, or other access-limiting device.

Biological mishap
An event in which the failure of laboratory facilities, equipment, or procedures appropriate to the level of potential pathogenicity or toxicity of a given etiologic agent (organism or toxin) may allow the unintentional, potential exposure of humans or the laboratory environment to that agent. Mishaps can be categorized into those resulting in confirmed exposures and those resulting in potential exposures.

Biosafety levels (BSL)
A combination of facilities, equipment, and procedures used in handling etiologic agents to protect the worker, environment, and the community. This combination is proportional to the potential hazard of the etiologic agent in question.

Biosafety level 1 (BSL–1)
The facilities, equipment, and procedures suitable for work involving agents of no known or of minimal potential hazard to laboratory personnel and the environment.

Biosafety level 2 (BSL–2)
The facilities, equipment, and procedures applicable to clinical, diagnostic, or teaching laboratories, suitable for work involving indigenous agents of moderate potential hazard to personnel and the environment. It differs from BSL–1 in that—

The laboratory personnel have specific training in handling pathogenic agents.
The laboratory is directed by scientists with experience in the handling of specific agents.
Access to the laboratory is limited when work is being conducted.
Certain procedures in which infectious aerosols could be created are conducted in biological safety cabinets or other physical containment equipment.
Personnel must be trained.
Strict adherence to recommended practices is as important in attaining the maximum containment capability, as is the mechanical performance of the equipment itself.

Biosafety level 3 (BSL-3)
The facilities, equipment, and procedures applicable to clinical, diagnostic, research, production facilities in which work is performed with indigenous or exotic agents where there is potential for infection by aerosol and the disease may have serious or lethal consequences. It differs from BSL–2 in that—

More extensive training in handing pathogenic and potentially lethal agents is necessary for laboratory personnel.
All procedures involving the manipulation of infectious material are conducted within biological safety cabinets or by other physical containment devices.
The laboratory has special engineering and design features, including access zones, sealed penetrations, and directional airflow.
Any modification of BSL–3 recommendations must be made only by the commander or director.

Biosafety level 4 (BSL–4)
The facilities, equipment, and procedures required for work with dangerous and exotic agents that pose a high individual risk of life-threatening disease. It differs from BSL–3 in that—

Members of the laboratory staff have specific and thorough training in handling extremely hazardous infectious agents.
Laboratory personnel understand the primary and secondary containment functions of the standard and special practices, containment equipment, and laboratory design characteristics.
Access to the laboratory is strictly controlled by the commander or director.
The facility is either in a separate building or in a controlled area within a building, which is completely isolated from all other areas of the building.
A specific facility operations manual is prepared or adopted.
Within work areas of the facility, all activities are confined to Class III biological safety cabinets or Class I or Class II biological safety cabinets used together with one–piece positive pressure personnel suits ventilated by a life–support system.
The maximum containment laboratory has special engineering and design features to prevent microorganisms from being disseminated to the environment.

Blister agent
A chemical agent that injures the eyes, lungs, and burns or blisters the skin.

Business plan
A comprehensive document that clearly describes how the safety office intends to obtain their strategic goals and objectives. It describes how they will execute their programs and processes, manage funding and manpower, and interface with other organizations to achieve those goals.

Chemical agent
A chemical compound intended for use (to include experimental compounds) in military operations to kill, seriously injure, or incapacitate persons through its physiological effects. Excluded are RDT&E solutions, riot control agents, chemical defoliants and herbicides, smoke, flame and incendiaries, and industrial chemicals.

Chemical agent operation
Any operation that involves chemical agents, including storage, shipping, handling, manufacturing, maintenance, test chamber activities, laboratory activities, surveillance, demilitarization, decontamination, disposal, and training.

Chemical ammunition
Ammunition, the filler of which has the basic function of producing a toxic or irritant effect on the body, a screening or signaling smoke, or an incendiary action.

Chemical event (Also see AR 50–6)
The term chemical event encompasses all chemical accidents, incidents, and politically/public sensitive occurrences. Specifically, this applies to—

Confirmed releases of agent from munitions. A confirmed chemical agent release from stockpile or nonstockpile chemical weapons is any detection of agent outside the munitions body or bulk storage container into the atmosphere outside of a closed containment system that is confirmed by corroborating positive detections. Closed containment systems include filtered bunkers, igloos, or overpack containers that are capable of preventing the escape of chemical agent in concentrations exceeding the acceptable exposure limit. Reporting will begin based on the time of release confirmation and must not wait until location and isolation of the leaking munitions/container is accomplished.
Discovery of an actual or suspected chemical agent munitions or container that may require emergency transportation and/or disposal. Discovery as part of planned real property remediation will not be reported as a chemical event unless emergency transportation or disposal is required, but it will be reported in accordance with remediation plans.
Confirmed detection of agent above short–term exposure limit occurring for any period outside the primary engineering control. This includes agent operations conducted in a closed system that is contained in a facility equipped with secondary engineering controls to protect unprotected workers or the ambient environment (for example, cascade ventilation/air filtrations).
Actual exposure of personnel to agent above the short–term exposure limit which is confirmed by clinical evaluation or initial laboratory evaluation or documented by sampling techniques. This includes any case where there is a reasonable belief that an exposure has occurred to any individual above these limits. Special attention needs to be given to workers reporting that they believe they were exposed to agent or the failure of personnel protective equipment.
Any terrorist or criminal act directed toward chemical agent storage, laboratory, or demilitarization facility or any deliberate release of chemical agent. This includes employment of an improvised chemical device intended to disperse chemical agent, regardless of whether the device has functioned.
Loss of chemical agent (other than deliberate destruction by approved, authorized laboratory and demilitarization processes).
Any malfunction or other significant activity at a chemical demilitarization plant that could reasonably be expected to cause concern within the local community or the press, or that, in the judgment of the facility or installation management or leadership, could cause embarrassment to the U.S. Army.
Above categories involving items configured as weapons containing the industrial chemical chlorine, hydrogen and potassium cyanide, carbonyl chloride, cyanogen chloride, or chloropicrin. This pertains to items that were designed as a delivery/dispersal system for use in war, irrespective of fusing or explosive configuration.

Chemical munitions and agents
An agent or munitions that through its chemical properties, produces lethal or other damaging effects to human beings, except that such term does not include riot control agents, chemical herbicides, smoke and other obscuration materials.

Chemical warfare
All aspects of military operations involving the use of lethal munitions/agents and the warning and protective measures associated with such offensive operations.

Chemical weapons system
An integrated relationship of chemical agents, munitions or spraying devices and their mode of delivery to the target.

Combat developer
Command or agency that formulates doctrine, concepts, organization, training, materiel requirements, and objectives. Represents the user community over the life cycle of the system.

Command responsibility
Commanders down the entire chain of command are responsible for the safety of their personnel.

Commander
An individual that lawfully exercises over subordinates by virtue of rank or assignment. This includes the authority and responsibility for effectively using available resources for planning the employment of, organizing, directing, coordinating and controlling military forces for the accomplishment of assigned missions. This also includes responsibility for health, welfare, morale, and discipline of assigned personnel in his "command," in accordance with FM 1–02 and FM 6–0. Examples of commanders are as follows:

Commander of an Army Headquarters, CONUS and OCONUS.
Chief of Engineers (civil and military works).
Commander, U.S. Army Space and Strategic Defense Command.
Chief, NGB.
Commander, U.S. Army Medical Research and Development Command.
Commanders of Army installations with a full–time safety professional. This includes posts, camps, stations, and military communities.
State Adjutants General (ARNG).
Commanders of Army Reserve organizations with a full–time safety professional.
Commanders of medical treatment facilities.
Commanders in direct support of general support maintenance units.
Director of Facilities Engineering.
Provost marshal/law enforcement commander.
Director of industrial operations.
U.S. Army Plant Representative Office.
Commanders of TOE, MTOE, or TDA organizations.

Competent authority
An individual of the armed forces designated in command, responsible for the direction, coordination and control of military forces. The commander alone is responsible for everything his unit does or fails to do. He cannot delegate his responsibility or any part of it although he may delegate portions of his authority to competent individuals. An individual designated by the commander to address areas of primary interest within that individual's technical expertise.

Composite risk
Blends tactical, threat–based risks with accidental, hazard–based risks (U.S. Army).

Concentration
The amount of a chemical agent present in a unit volume of air. Usually expressed in milligrams per cubic meter (mg/m^3).

Confirmed exposure
Any mishap with a biological program agent in which there was direct evidence of an actual exposure such as a measurable rise in antibody titer to the agent or a confirmed diagnosis of intoxication or disease.

Conservation
The protection, improvement, and use of natural resources according to principles that will provide optimum public benefit and support of military operations.

Contracting agency
The organization that has primary responsibility for monitoring, administering, and ensuring compliance with the contract, especially pertaining to the chemical agent program.

Counseling/advisory
Activities associated with nonsupervisory advice/assistance provided by subject matter specialists on specific topics, for example, alcohol/drug abuse, mental health, community services.

Contracting officer
A designated officer who performs administrative functions listed in the Federal Acquisition Regulation.

Contractor accident
An accident that occurs as a result of a Government contractor's operations in which there is damage to U.S.

Government or Army property or equipment, injury or occupational illness to Army personnel, or other reportable event.

Control
Action taken to eliminate hazards or reduce their risk.

Conveyance
A truck, tractor-trailer, railcar or commercial inter-modal container (CIC) used for transportation of ammunition, explosives or HAZMAT.

Department of the Army contractor
A non–Federal employer engaged in performance of a DA contract, whether as prime contractor or subcontractor.

Department of the Army installation
A grouping of facilities located in the same vicinity that supports a particular DA functions. Installations may include locations such as posts, camps, stations, or communities, land, and improvements permanently affixed thereto which are under the DA control and used by Army organizations. Where installations are located contiguously, the combined property is designated as one installation and the separate functions as activities of that installation. In addition to those used primarily by troops, the term "installation" applies to such real properties as depots, arsenals, ammunition plants (both contractor and Government operated), hospitals, terminals, and other special mission installations.

Debris
Any solid particle thrown by an explosion or other strong energetic reaction. For aboveground detonations, debris usually refers to secondary fragments. For underground storage facilities, debris refers to both primary and secondary fragments, which are transported by a strong flow of detonation gases.

Decontamination
The physical or chemical processes by which an object or area, contaminated with a harmful or potentially harmful substance (for example, chemical agent, explosives, etiologic agent, hazardous chemical, and so forth) is made safe for handling or use. Such processes include physical removal of all contaminants, thermal destruction of sterilization, chemical inactivation or a combination of these methods.

Decontaminating material
Any substance used to chemically destroy, physically remove, seal, or otherwise make harmless a chemical agent.

Demilitarization
The mutilation, destruction, or neutralization of chemical agent materiel, rendering it harmless and ineffectual for military purposes.

Detection
The determination of the presence of a chemical agent.

Dud
An explosive item or component of a weapon system that fails to function.

Educational
Includes classroom training, excludes field settings such as field training exercises and maneuvers. Examples: Teach/instruct/brief/counsel student/audience activities.

Emergency
An event for which an individual perceives that a response is essential to prevent or reduce injury or property damage.

Emergency disposal
Immediate transportation and disposal of chemical agents/munitions when the senior EOD person determines the health or safety of any person is clearly endangered.

Engineering controls
Regulation of facility operations using prudent engineering principles, such as facility design, operation sequencing, equipment selection, and process limitations.

Engineering or construction
Those activities associated with surveying, building, and erecting, dissembling or destroying things. Examples: Lay/clear minefields, bridging, quarrying, welding, brazing, roofing, installing electrical wiring, painting, land surveying, demolition, clearing, digging, concrete work, masonry work, dredging, trenching.

Environmental factors
Environmental conditions, which had, or could, have had an adverse effect on the individual's actions or the performance of equipment.

EOD
The detection, identification, field evaluations, rendering safe, recovery, and final disposal of unexploded explosive ordnance or munitions chemical agents.

EOD procedures
Those particular courses or modes of action for access to, recovery, render safe, and final disposal of explosive ordnance or any HAZMAT associated with an EOD incident.

Establishment
A single physical location where business is conducted or where services or operations are performed. Where distinctly separate activities are performed at a single physical location, each activity shall be treated as a separate establishment. Typically, an establishment refers to a field activity, regional office, area office, installation, or facility.

Etiologic agent
A viable microorganism or its toxin that causes or may cause human disease, and includes those agents listed in 42 CFR 72.3 of the HHS regulations and any material of biologic algorithm that poses a degree of hazard similar to those organisms.

Evaluation
A specialized inspection designed to determine the effectiveness of a unit's safety and health program.

Exclusive Federal jurisdiction
(Otherwise termed exclusive legislative jurisdiction.) Applies to situations where the Federal Government has received, by whatever method, all the authority of the state, with no reservation made to the state, except of the right to serve process resulting from activities that occurred off the land involved.

Experimental chemical agents
Chemical substances being tested, developed, or altered for chemical defense purposes that— are used solely by the military; are contained in items configured as a weapon; and have toxicities equal to or greater than current nerve or mustard agents.

Exposure
The frequency and length of time personnel and equipment are subjected to a hazard.

Explosion
A chemical reaction of any chemical compound or mechanical mixture that, when initiated, undergoes a very rapid combustion or decomposition, releasing large volumes of highly heated gases that exert pressure on the surrounding medium. Depending on the rate of energy release, an explosion can be categorized as a deflagration or a detonation.

Explosive license
An installation–generated document which shows the allowable net explosives weight at each explosive site.

Exposed site
A location exposed to the potential hazardous effects (blast, fragments, debris, and heat flux) from an explosion at a PES.

Facility
An area within a building that provides appropriate protective barriers for persons working in the facility and the environment external to the facility, and outside of the building.

Fair wear and tear (FWT)
Expected deterioration of an item that occurs with use.

Federal OSHA official
Investigator or compliance officer employed by, assigned to, or under contract to OSHA.

Field operations
Operations conducted outdoors or outside of man-made enclosures or structures that contain built-in alarms or engineered chemical agent controls. Short-term operations in storage structures are also considered field operations.

Firefighting
Activities associated with developing or using firefighting skills. Excludes vehicle operation going to and from the scene.

First aid
Multiple applications of first aid do not represent medical treatment. It is the nature of the treatment, not how many times it is applied, as to whether it qualifies as first aid or medical treatment. Treatment may include—

Using a nonprescription medication at nonprescription strength.
Cleaning, flushing, or soaking wounds on the surface of the skin
Using hot or cold therapy.
Using any temporary immobilization devices while transporting a victim.
Draining fluid from a blister.
Removing foreign bodies from the eye using only irrigation or a cotton swab.
Using finger guards.
Massaging (though physical and chiropractic therapy are defined as medical treatment).
Drinking fluids for relief of heat stress.

Flammable
A material that has the characteristic of being easily ignited and burning readily.

Foreign object damage (FOD)
Damage to Army vehicle/equipment/property as a result of objects alien to the vehicle/equipment damaged. Excludes aircraft turbine engines defined as a FOD incident.

Fragment
A piece of an exploding or exploded munitions. Fragments may be complete items, subassemblies, pieces thereof, or pieces of equipment or buildings containing the items.

Fragment distance
The limiting range, based on a specific density of hazardous fragments, expected from the type and quantity of explosives involved. Used in establishing certain Q–D criteria. A hazardous fragment is a fragment having an impact energy of 58 foot-pounds or greater. Hazardous fragment density is a density of hazardous fragments exceeding one per 600 square feet.

Fratricide
A circumstance in which members of a United States or friendly military force are mistakenly or accidentally killed or injured in action by United States or friendly forces actively engaged with an enemy or who are directing fire at a hostile force or what is thought to be a hostile force.

Ground accident
Any accident exclusive of aviation (flight/flight related) (for example, AMV, ACV, POV, marine.)

Guided missile
An unmanned vehicle moving above the surface of the Earth whose trajectory or flight is capable of being altered by an external or internal mechanism.

Gun target line
An imaginary line drawn between the firing position and target position. Also referred to as the line of fire.

Handling/material/passengers
Activities associated with the transportation, distribution, and storage of material or passengers. Examples: Distributing/issuing, loading/unloading, transporting/moving/delivering, packing/unpacking/preserving, inventorying/inspecting, weigh/measure, palletize/slingload/rig, retrieve, turn in/store.

Hazard
Any actual or potential condition that can cause injury, illness, or death of personnel or damage to or loss of equipment, property or mission degradation, or a condition or activity with potential to cause damage, loss, or mission degradation.

Hazard analysis
A hazard analysis is a clear, systemic, concise, well defined, orderly, consistent, closed-loop, quantitative or qualitative and objective methodology used to identify possible hazards within a mission, system, equipment or process that can cause losses to the mission, equipment, process, personnel or damage to the environment. Examples of hazard analyses are What-If, Preliminary Hazard Analysis, Sneak Circuit Analysis, Hazard and Operability Study, Fault Tree Analysis, Failure Mode and Effects Analysis, and Fault Hazard Analysis.

Hazardous chemicals
The OSHA uses the term hazardous chemical to denote any chemical that would be a risk to employees if exposed in the work place. Hazardous chemicals cover a broader group of chemicals than the other chemical lists.

Hazard class
The United Nations Organization hazardous classification system, which contains 9 hazard classes, is used by the DOD for dangerous materials to identify the hazardous characteristics of A&E. Hazard Class 1 (A&E) is further divided into six division designators that indicate the primary characteristics and associated hazards.

Hazard Classification
An assignment of ammunition and explosives (class 1 substances) into one of six divisions for purposes of storage, transportation, and QD computations. These divisions are—

1.1 – mass detonating.
1.2 – fragment producing.
1.3 – mass fire.
1.4 – moderate fire.
1.5 – very insensitive explosives and blasting agent (used by the Army for transportation only).
1.6 – extremely insensitive ammunition.

Hazardous materials
Definitions are—

"Hazardous material" means any material that has been designated as hazardous under 49 USC 5101 to 49 USC 5127 and is required to be placarded under 49 CFR 172, Subpart F or any quantity of material listed as a select agent or toxin in 42 CFR 73.
Substances that have hazardous characteristics such as flammable, corrosive, reactive, toxic, radioactive, poisonous, carcinogenic or infectious, having properties capable of producing adverse effects on the health and safety or the environment of a human being. Legal definitions are found in individual regulations.
Any substance or material that when involved in an accident and released in sufficient quantities, poses a risk to people's health, safety, and/or property. These substances and materials include explosives, radioactive materials, flammable liquids or solids, combustible liquids or solids, poisons, oxidizers, toxins, and corrosive materials (Federal Emergency Management Agency definition).
The DOT uses the term hazardous materials which covers 8 hazard classes, some of which have subcategories called classifications and a ninth class covering other regulated materials. The DOT includes in its regulations hazardous substances and hazardous wastes as other regulated materials–E, both of which are regulated by the EPA, if their inherent properties would not otherwise be covered.

Hazardous substances
Two forms of definitions—

The EPA uses the term hazardous substance for the chemicals that, if released into the environment above a certain amount, must be reported and depending on the threat to the environment, Federal involvement in handling the incident can be authorized. A list of the hazardous substances is published in 40 CFR 302, Table 302.4.

The OSHA uses the term hazardous substance in 29 CFR 1910.120, which resulted from Title I of SARA and covers emergency response. OSHA uses the term differently than EPA. Hazardous substances, as used by OSHA, cover every chemical regulated by both DOT and EPA.

Extremely hazardous substances
The EPA uses the term extremely hazardous substance for the chemicals that must be reported to the appropriate authorities if released above the threshold reporting quantity. Each substance has a threshold reporting quantity. The list of extremely hazardous substances is identified in Title III of Superfund Amendments and Reauthorization Act (SARA) of 1986 (40 CFR 355).

Flight mission
Flight or series of flights (sorties), conducted to accomplish a specific task or series of tasks in support of the unit's approved mission statement. Each mission is assigned to a designated pilot in command (PC) and or air mission commander (U.S. Army Materiel Command).

Hazardous wastes
The EPA uses the term hazardous wastes for chemicals that are regulated under the Resource, Conservation and Recovery Act (42 USC 6901). Hazardous wastes in transportation is regulated by DOT (49 CFR 170 through 49 CFR 179).

Toxic chemicals
The EPA uses the term toxic chemical for chemicals whose total emissions or releases must be reported annually by owners and operators of certain facilities that manufacture, process, or otherwise use a listed toxic chemical. The list of toxic chemicals is identified in Title III of SARA.

HC smoke
Hexachloroethane–zinc oxide used to generate screening smoke.

Health hazard
An existing or likely condition, inherent to the operation, maintenance, storage or disposal of materiel or a facility, that can cause death, injury, acute or chronic illness, disability, or reduced job performance.

Health hazard assessment
The applications of biomedical and psychological knowledge and principles to identify, evaluate, and control the risk to the health and effectiveness of personnel who test, use, or service Army systems.

Hospitalization
Admission to a hospital as an inpatient for medical treatment.

Human error
Human performance that deviated from that required by the operational standards or situation. Human error in accidents can be attributed to a system inadequacy/root cause in training, standard, leader, individual, or support failure indicated below:

Human factors
Human interactions (man, machine, and/or environment) in a sequence of events that were influenced by, or the lack of human activity, which resulted or could result in an Army accident.

Human factors engineering
A comprehensive technical effort to integrate into Army doctrine, materiel development, and materiel acquisition (to ensure operational effectiveness) all relevant information on— human characteristics (skill capabilities); performance (anthropometric data); biomedical factors (safety factors); training (manning implications).

Imminent danger
Conditions or practices in any workplace that pose a danger that reasonably could be expected to cause death or severe physical hardship before the imminence of such danger could be eliminated through normal procedures.

Impact area
The ground and associated airspace within the training complex used to contain fired or launched ammunition and explosives and the resulting fragments, debris, and components from various weapon systems. A weapon system

impact area is the area within the surface danger zone used to contain fired or launched ammunition and explosives and the resulting fragments, debris, and components. Indirect fire weapon system impact areas include probable error for range and deflection. Direct fire weapon system impact areas encompass the total surface danger zone from the firing point or positions down range to distance X—

Temporary impact area. An impact area within the training complex used for a limited period of time to contain fired or launched ammunition and explosives and the resulting fragments, debris, and components. Temporary impact areas are normally used for non–dud–producing ammunition or explosives and should be able to be cleared and returned to other training support activities following termination of firing.

Dedicated impact area. An impact area that is permanently designated within the training complex and used indefinitely to contain fired or launched ammunition and explosives and the resulting fragments, debris, and components. Dedicated impact areas are normally used for less sensitive ammunition and explosives than that employed in high hazard impact areas. However, any impact area containing fused HE or white phosphorous duds represent a high risk to personnel and access must be limited and strictly controlled.

High hazard impact area. An impact area that is permanently designated within the training complex and used to contain sensitive HE ammunition and explosives and the resulting fragments, debris, and components. High-hazard impact areas are normally established as part of dedicated impact areas where access is limited and strictly controlled because of the extreme hazard of dud ordnance such as ICM, HEAT, 40mm, and other highly sensitive ammunition and explosives.

Improved conventional munitions
Munitions characterized by the delivery of 2 or more antipersonnel, anti–materiel, and or anti–armor submunitions.

Incapacitating agents
Agents that produce physiological or mental effects, or both, that may persist for hours or days after exposure, rendering individuals incapable of concerted effort in the performance of their assigned duties. Complete recovery of incapacitating agent casualties is expected without medical treatment.

Independent evaluation
The process used by the independent evaluators to independently determine if the system satisfies the approved requirements. It will render an assessment of data from all sources, simulation and modeling, and an engineering or operational analysis to evaluate the adequacy and capability of the system.

Independent safety assessment
That document prepared by the USACRC and forwarded to the AAE assessing the risk of the residual hazards in a system prior to the MDRs.

Individual risk
Risk to a single exposed person (RALCT).

Industrial chemical
Chemicals developed or manufactured for use in industrial operations or research by industry, Government, or academia. Man does not primarily manufacture these chemicals for the specific purpose of producing human casualties or rendering equipment, facilities, or areas dangerous for use.

Inherent hazard
An existing or permanent hazard (such as voltage, for example).

Injury
A traumatic wound or other condition of the body caused by external force, including stress or strain. The injury is identifiable as to time and place of occurrence and member or function of the body affected, and is caused by a specific event, incident, or series of events or incidents within a single day or work shift.

Inspection
Comprehensive survey of all or part of a workplace in order to detect safety and health hazards. Inspections are normally performed during the regular work hours of the agency, except as special circumstances may require. Inspections do not include routine, day-to-day visits by agency occupational safety and health personnel, or routine workplace surveillance (29 CFR 1960.2(k)). It is also the process of determining compliance with safety and health standards through formal and informal surveys of workplaces, operations, and facilities.

Installation
An aggregation of contiguous or near contiguous, common mission supporting real property holdings under the jurisdiction of the DOD within and outside CONUS. Examples include, but are not limited to, posts, camps, bases, and stations.

Installation-level safety director
The senior full–time safety professional responsible for providing safety support to Army installations, including camps, stations, military communities, and USAR organizations.

Intent for flight
Intent for flight begins when power is applied or brakes released to move the aircraft under its own power, for the purpose of commencing authorized flight with an authorized crew. Intent for flight ends when the aircraft is at a full stop and power is completely reduced.

Investigation
A systematic study of an accident, incident, injury, or occupational illness circumstances.

Job transfer
When an employee/Soldier is assigned to a job other than his/her regular job for part of the day as a result of an injury or occupational illness.

Laboratory
An individual room or rooms within a facility that provides space in which work with etiologic or chemical agents may be performed. It contains appropriate engineering features and equipment required for either a given BSL or chemical agent to protect personnel working in the laboratory and the environment and personnel outside of the laboratory.

Laser
A device capable of producing a narrow beam of intense light (LASER–light amplification by stimulated emission of radiation (see TB MED 524 and JCS Pub 3–09.1 for more information on lasers).

Leased aircraft
Any Government–owned aircraft provided to a contractor under a Lease Agreement for use in conjunction with a specific contractor need. Aircraft are usually leased to a contractor for the contractor's use. Aircraft are usually bailed to a contractor to perform Government contract work. DODD 7230.8 further clarifies leased aircraft procedures and requirements. Lease agreements are legal contracts between the Government Program Office and the contractor.

Lewisite
The chemical dichloro(2-chlorovinyl)arsine, chemical abstracts service registry No. 541–25–3, in pure form and in the various impure forms that may be found in storage as well as in industrial, depot, or laboratory operations.

Life cycle
The life of a system from conception to disposal.

Maintenance/repair/servicing
Activities associated with the maintenance, repair or servicing of equipment and other property. Excludes janitorial, housekeeping or grounds-keeping activities. Examples: Install/remove/modify equipment, tune/adjust/align/ connect, hot–metal work, cold–metal work, plastic working, soldering, repairing tires, inspecting tires/batteries, fueling/defueling, changing/inflating tires, charging batteries.

Malfunction
Failure of an ammunition item to function as expected when fired, launched, or when explosive items function under conditions that should not cause functioning. Malfunctions include hang–fires, misfires, duds, abnormal functioning and premature functioning of explosive items under normal handling, maintenance, storage, transportation, and tactical deployment. Malfunctions do not include accidents or incidents that arise solely from negligence, all practice, or situations such as vehicle accidents or fires.

MANPRINT
A comprehensive management and technical program designed to improve total system (leader, unit/Soldier, and equipment) performance by focusing on the human requirements for optimal system performance. This is achieved by examination of optimal allocation of total system functions and tasks to man, machine, or a combination, and the

continuous integration of personnel capabilities, manpower, training, human factors engineering, system safety, health hazards, and soldier survivability.

Materiel acquisition decision process
Those milestone reviews held to determine if a system is ready to progress to the next phase of the acquisition process.

Materiel developer
Command or agency responsible for the functional support for the research, development, and acquisition process.

Materiel factors
When materiel elements become inadequate or counterproductive to the operation of the vehicle/equipment/system.

Maximum credible event
The maximum credible event is the most disastrous maximum credible loss identified for a given system or operation. In explosives and chemical agent hazards evaluation, the maximum credible event due to a hypothesized accidental explosion, fire, or toxic chemical agent release (with explosives contribution) is the worst single event that is likely to occur from a given quantity and disposition of ammunition and explosives. The event must be realistic with a reasonable likelihood of occurrence considering the means of initiation, explosion propagation, burning rate characteristics, and physical protection given to the items involved. The maximum credible event evaluated on this basis may then be used as a basis for effects calculations and casualty predictions.

Maximum credible loss
The maximum credible loss is the most probable, believable, and catastrophic outcome of a hazard's affect on mission, personnel, facilities, and/or environment due to the occurrence of a particular event or series of events. A maximum credible loss is identified for the possible initiation of each cause associated with a given hazard resulting in undesired results.

Medical surveillance
A program composed of pre-placement, job transfer, periodic, and termination examinations that are provided to all personnel potentially exposed to chemical agent health hazards in the work environment.

Medical treatment
Medical treatment is the management and care of a patient to combat disease or disorder. It does not include—

Visits to a physician or licensed health care professional solely for observation or counseling.
Diagnostic procedures.
First aid.

Military operations in urban terrain (MOUT)
A terrain complex where manmade construction impacts on the tactical options available to commanders. These MOUT facilities replicate urban environments.

Military personnel
All Soldiers; that is, U.S. Army active duty personnel; USAR or Army National Guard personnel on active duty or full–time National Guard duty or in a paid drill status; Service Academy midshipmen/cadets; ROTC cadets when engaged in directed training activities; foreign national military personnel assigned to DA; and members of other United States uniformed services assigned to DA.

Military unique equipment, systems, and operations
The term uniquely military equipment, systems, and operations excludes from the scope of 29 CFR 1960, Basic Program Elements for Federal Employee Occupational Safety and Health Programs and Related Matters, the design of DOD equipment and systems that are unique to the national defense mission, such as military aircraft, ships, submarines, missiles, and missile sites, early warning systems, military space systems, artillery, tanks, and tactical vehicles; and excludes operations that are uniquely military such as field maneuvers, naval operations, military flight operations, associated research test and development activities, and actions required under emergency conditions. The term includes within the scope of the Order Department of Defense workplaces and operations comparable to those of industry in the private sector such as Vessel, aircraft, and vehicle repair, overhaul, and modification (except for equipment trials); construction; supply services; civil engineering or public works; medical services; and office work.

Monitoring
The continued or periodic act of seeking to determine whether a chemical agent is present.

Motorcycle
Powered 2– and 3–wheeled vehicles, including mopeds and motorbikes.

Munitions and explosives of concern (MEC)
This term, which distinguishes specific categories of military munitions that may pose unique explosives safety risks means— unexploded ordnance, as defined in 10 USC 101(e)(5)(A) through (C); (B); discarded military munitions (DMM), as defined in 10 USC 2710(e)(2); or munitions constituents (for example, TNT, RDX) present in high enough concentrations to pose an explosive hazard.

Munitions response
Response actions, including investigation, removal actions and remedial actions to address the explosives safety, human health, or environmental risks presented by unexploded ordnance, discarded military munitions (DMM), or munitions constituents (MC).

Mustard
The chemical bis(2–chloroethyl)sulfide, chemical abstracts service registry No. 505–60–2, in pure form and in the various impure forms that may be found in munitions as well as field, industrial, or laboratory operations. These include Levinstein mustard (H), distilled mustard (HD), and closely related preparations. This standard is not meant to be applied to nitrogen mustards.

Near miss
A potentially serious accident or incident that could have resulted in personal injury, death, or property damage, damage to the environment and/or illness but did not occur due to one or more factors.

Nerve agent
A lethal agent that causes casualties by interfering with the ability of muscles to relax after stimulation by associated nerves.

Neutralization
The act of altering the chemical, physical, and toxicological properties to render the chemical agent ineffective for use as intended.

Nonappropriated Fund (NAF) employees
Employees paid from nonappropriated funds, including summer and winter hires and special NAF program employees. Military personnel working part-time in NAF employment are excluded.

Non–DOD component
Any entity (Government, private, or corporate) that is not a part of DOD.

Note
Additional information provided to expand understanding of the subject and to call attention to areas of interest.

Nuclear Weapon
A device in which the explosion results from the energy released by reactions involving atomic nuclei, either fission, fusion, or both. For the purpose of this regulation, nuclear components of weapons are also included.

Occupational hazard
Conditions, procedures, and practices directly related to the work environment that creates a potential for producing occupational injuries or illnesses.

Occupational illness
Non-traumatic physiological harm or loss of capacity produced by systemic infection; continued or repeated stress or strain; for example, exposure to toxins, poisons, fumes; or other continued and repeated exposures to conditions of the work environment over a long period of time. Includes any abnormal physical or psychological condition or disorder resulting from an injury, caused by long or short-term exposure to chemical, biological, or physical agents associated with the occupational environment. For practical purposes, an occupational illness is any reported condition that does not meet the definition of an injury.

Occupational injury
A wound or other condition of the body caused by external force, including stress or strain. The injury is identifiable as to time and place of the occurrence and a member or function of the body affected, and is caused by a specific event, incident, or series of events or incidents within a single day or work shift.

Office
Activities associated with the performance of clerical, typing, and administrative type duties. Excludes supervisory activities. Examples: Typing/work processing, filing/posting, telephoning, operating office machines.

Off–duty
Army personnel are off–duty when they—

Are not in an on–duty status, whether on or off Army installations.
Have departed official duty station, TDY station, or ship at termination of normal work schedule.
Are on leave and/or liberty.
Are traveling before and after official duties, such as driving to and from work.
Are participating in voluntary and/or installation team sports.
Are on permissive (no cost to Government other than pay) TDY.
Are on lunch or other rest break engaged in activities unrelated to eating or resting.

Officer in charge
The officer, warrant officer, or NCO responsible for personnel conducting firing or operations within the training complex.

On–duty
Army personnel are considered on–duty, for purposes of accidents, when they are—

Physically present at any location where they are to perform their officially assigned work. (This includes those activities incident to normal work activities that occur on Army installations, such as lunch, coffee, or rest breaks, and all activities aboard vessels.
Being transported by DOD or commercial conveyance for the purpose of performing officially assigned work. (This includes reimbursable travel in POVs for performing TDY, but not routine travel to and from work.)
Participating in compulsory physical training activities (including compulsory sports) or other installation events.

Operating vehicle or vessel
Activities associated with operating vehicles or vessels under power. Examples: Driving, convoying/road marching, towing/pushing, mowing, hauling/transporting, driver testing, flying, vehicle road testing.

Operational control
Operational control is the authority to perform those functions of command over subordinate forces involving organizing and employing command and forces, assigning tasks, designating objectives, and giving authoritative direction necessary to accomplish the mission. Operational control includes authoritative direction over all aspects of military operations and Joint training necessary to accomplish missions assigned to the command. It does not, in and of itself, include authoritative direction for logistics or matters of administration, discipline, internal organization, or unit training.

Overhead fire
Weapon system firing that is delivered over the heads of unprotected personnel in training or personnel located anywhere in the surface danger zone.

Over-the road
Operation or driving on paved roads/highways.

Permanent partial disability
Any injury or occupational illness that does not result in death or permanent total disability but in the opinion of competent medical authority, results in the loss or permanent impairment of any part of the body, with the following exceptions:

Loss of teeth— loss of fingernails or toenails.
Loss of tip of fingers or tip of toe without bone involvement— inguinal hernia, if it is repaired.

Disfigurement— sprains or strains that do not cause permanent limitation of motion.

Permanent total disability
Any nonfatal injury or occupational illness that, in the opinion of competent medical authority, permanently and totally incapacitates a person to the extent that he or she cannot follow any gainful employment. (The loss or loss of use of both hands, feet, eyes, or any combination thereof as a result of a single accident will be considered as permanent total disability.)

Physical training
Body conditioning or confidence building activities, excludes combat skills development. Examples: Confidence courses, combat football, combat basketball, push–ball, marches, calisthenics, pugil stick, running/jogging, physical training test.

Positive control
At a burning site, this is a means to prevent items, energetic material, or embers from being ejected to a place where they could cause injury or damage.

Probability
Probability is the qualitative or quantitative likelihood of a particular event or sequence of actions initiated by a hazard-related Cause resulting in the Maximum Credible Loss. The Probability can be expressed as the product of the Incident Rate and Mishap Set Likelihood.

Project-product manager
Individual chartered to conduct business on behalf of the Army who reports to and receives direction from either a program executive officer, the AAE, or other materiel developer and is responsible for the centralized management of a specified acquisition program.

Project the force
One of the Army's four core capabilities. This capability includes the processes of tailoring, mobilizing and projection of land power, and supporting organizational training. Recognized as the overriding capability by which the Army will be measured is the ability to rapidly deploy ready forces into a distant area of operations and keep them coming as dictated by the tempo of battle.

Prophylaxis
Measures designed to preserve health.

Quality assurance specialist (ammunition surveillance)
Department of Army Civilian personnel in the grade of GS–09 or above who have received 2 years of ammunition training and are qualified in accordance with AR 75–1 to assist in performing malfunction investigations.

Qualified safety and health personnel
Includes persons who meet OPM standards for Safety and Occupational Health Manager/Specialist, GS–018, and Safety Engineer, GS/GM–803. Other job specialties will provide support in their respective specialty areas (for example, Safety Engineering Technician, GS–802; Safety Technician, GS–019; Aviation Safety Officer, GS–1825; Air Safety Investigating Officer, GS–1815; Fire Protection Engineer, GS–804; Fire Protection Specialist/Marshal, GS–081; Medical Officer, GS–602; Health Physicist, GS–1306; Industrial Hygienist, GS–690; Occupational Health Nurse, GS–610; Environmental Health Technician, GS–699; or other personnel determined to be equally qualified as compared to the above OPM standards.

Quantity/distance
The quantity of explosives material and distance separation relationships that provide defined types of protection.

Research, development, test, and evaluation dilute solution
Solutions of chemical agents in concentrations and quantities reduced by admixture (dilution) to levels that can be handled with the same precautions associated with industrial chemicals (acids, bases, and solvents). The following levels are considered RDT&E solutions:

Concentrations of H, HD, HQ, Q, T, or HT not greater than 10 mg/mL (chemical agent/solvent) and containing not greater than 100 mg of chemical agent.
Concentrations of GA, GB, GD, or GF not greater than 2 mg/mL (chemical agent/solvent) and containing a maximum quantity of 20 mg of chemical agent.

Concentrations of VX not greater than 1 mg/mL (chemical agent/solvent) and containing a maximum quantity of 10 mg of chemical agent.
Concentrations of L and HL not greater than 5 mg/mL (chemical agent/solvent) and containing a maximum quantity of 50 mg of chemical agent.

Real time
A period of less then 15 minutes.

Recommendations
Those actions advocated to the command to correct system inadequacies that caused, contributed, could cause or contribute to an Army accident. Also referred to in this regulation as corrective action, remedial measures and/or countermeasures.

Recordable accident
Injuries or occupational illnesses that result in—

Death— Days away from work.
Restricted work activity— transfer to another job.
Medical treatment beyond first aid— loss of consciousness.
Significant injury or illness diagnosed by a physician or licensed health care professional— Needlestick injuries and cuts from sharps that are contaminated with another person's blood or other potentially infectious material.
Medical removal under medical surveillance requirements of an OSHA standard— Occupational hearing loss if the employee has experienced a work–related standard threshold shift (sts) in one, or both ears and the employee's total hearing level is 25 db or more about audiometric zero in same ear(s) as the "sts," work–related tuberculosis cases.

Residual hazards
Hazards that are not eliminated by design.

Residual Significant risk
Residual Significant Risk is any risk remaining in a system after corrective actions have been executed.

Residual risk
The levels of risk remaining after controls have been identified and countermeasures selected for hazards that may result in loss of combat power. Risks remaining after hazard mitigation measures have been applied.

Restricted work activity
Individual's injury is such that they are unable to perform their normal duties (for example, light duty).

Restricted area
Any area, usually fenced, at an establishment where the entrance and egress of personnel and vehicular traffic are controlled for reasons of safety and/or security.

Rigger–in–charge
The rigger–in–charge has overall control of the operation including: planning all aspects of the lift; determining the weight of the load to be lifted; establishing the appropriate method of communication with the operator; ensuring the load is properly rigged; ensuring the operating envelope remains clear of all obstructions; providing signals to the operator; and conducting the operation in a safe manner (see source for management of weight handling equipment NAVFAC P–307).

Riot control agent
A substance that produces temporary irritating or disabling physical effects that disappear within minutes of removal from exposure. There is no significant risk of permanent injury, and medical treatment is rarely required.

Risk
Risk is directly related to the ignorance or uncertainty of the consequences of any proposed action. Risk is an expression of possible loss in terms of hazard severity and hazard probability. Risk is the expected value of loss associated with a loss caused by a hazard expressed in dollars. The risk associated with this loss is mathematically derived by multiplying the probability of the loss's likelihood of occurrence by the probable dollar loss associated with

the loss's severity. Note that risk has 2 dimensions— likelihood and magnitude, while a hazard has only 1— varied magnitude.

Risk acceptability
Risk Acceptability is that level of risk which has been determined as tolerable in order to fulfill mission requirements. It represents a level of risk where either the output of resources to rectify safety deficiencies does not result in a proportional increase in the level of safety be provided; or so restricts the performance that the assigned mission cannot executed.

Risk acceptance
Risk acceptance is a formal and documented process indicating Army leadership understands the hazard, its associated cause, and the probable consequences to mission, personnel, equipment, public and/or the environment and that they have determined that the total risk is acceptable because of mission execution. Risk acceptance is an Army leadership prerogative.

Risk assessment
An evaluation of a risk in terms of loss should a hazard result in an accident and against the benefits to be gained from accepting the risk.

Risk acceptance level
Risk Acceptance Levels are used to denote the level of risk a particular level of Army Leadership and Management may accept. These levels are based on the magnitude of the risk involved and the duration of the risk acceptance.

Risk decision
The decision to accept or not accept the risk(s) associated with an action; made by the commander, leader, or individual responsible for performing that action and having the appropriate resources to control or eliminate the risk's associated hazard.

Rocket
A motor which derives its thrust from ejection of hot gases generated from propellants carried within the motor casing.

ROTC personnel
Definition: 1. Members of the ROTC during periods of basic or advanced training at premises owned or under the control of the Army whether on–duty or off–duty. 2. Cadets performing professional enrichment training while under Army supervision and directed by competent orders, regardless of the location of the training site. Regular training on campus is excluded; that is, weekly drill and classroom instruction. 3. Cadets involved in rifle and pistol marksmanship training under Army supervision on any firing range. 4. Cadets undergoing ROTC flight instruction.

Safety
Freedom from those conditions that can cause death, injury, occupational illness, or damage to, or loss of, equipment or property.

Safety assessment report
A formal, comprehensive safety report summarizing the safety data that has been collected and evaluated during the life cycle before a test of an item. It expresses the considered judgment of the developing agency on the hazard potential of the item, and any actions or precautions that are recommended to minimize these hazards and to reduce the exposure of personnel and equipment to them.

Safety certification program
A program established and maintained by the battalion/squadron commander to ensure that personnel under their command designated as officer in charge and RSOs are competent and qualified to carry out the responsibilities and duties of the respective positions.

Safety confirmation letter
A separate document or part of the independent evaluation report or position letter that provides the materiel developer with the developmental test or operational test agency safety findings and conclusions, and states whether the specified safety requirements are met.

Safety controls
Mandatory procedural safeguards approved by the SA and determined to be necessary per safety studies and reviews.

Safety controls ensure maximum safety of chemical agents throughout the life of the chemical weapon. Controls will be consistent with operational requirements.

Safety objectives
Criteria for comparing and judging measures for adequacy. Safety objectives incorporate the safest measures consistent with operational requirements.

Safety release
A formal document issued to any user or technical test organization before any hands–on training, use, or maintenance by troops. The safety release is a stand–alone document which indicates the system is safe for use and maintenance by typical user troops and describes the specific hazards of the system or item based on test results, inspections, and system safety analyses. Operational limits and precautions are included. The test agency uses the data to integrate safety into test controls and procedures and to determine if the test objectives can be met within these limits. A limited safety release is issued on one particular system (Bradley Fighting Vehicle, Serial No. XXXXX). A Conditional Safety Release is issued when further safety data are pending (for example, completion of further testing or a certain safety test) and restricts a certain aspect of the test.

Security/law enforcement
Activities associated with MP, CID, and other military or civilian personnel performing security or law enforcement rescue duties. Examples: Traffic safety, investigating, apprehending suspects, guarding/patrolling, controlling disturbances, intelligence activities.

Self–aid
Administration of a chemical agent antidote to oneself upon experiencing early symptoms of chemical agent poisoning.

Self/buddy aid
Administration of a chemical agent antidote to one's self or to a co–worker upon experiencing early symptoms of chemical agent poisoning.

Severity
Severity is a qualitative or quantitative assessment of the degree of injury, occupational illness, property, facility or environmental damage associated with the maximum credible loss. Severity is dependent only on the Maximum Credible Loss. Once established for a Maximum Credible Loss, it does not change only the probability of a Maximum Credible Loss can be reduced.

Significant risk
A risk associated with a particular hazard where the hazard likelihood of occurrence and its potential impact on the mission, person, equipment or facility is such that it can be reasonability expected to cause bodily harm, damage to equipment or the facility or delay in the execution of the mission unless corrected. Normally, they are assigned a RAC of 1, 2, or 3.

Single-hazard risk
Risk associated with a single hazard of the system. Single hazard risks are characterized by consequence/probability pairs (these risks are typically classified by RAC matrix cells).

Single hearing protector (or protection)
Wearing either earplugs or noise muffs or noise attenuating helmets.

Sling out area
The loading of A&E into cargo nets for transportation beneath a helicopter for resupply of units not accessible by ground transportation or when time or security is a critical factor.

Soldiering
Noncombat activities peculiar to military life, includes receiving instruction/training in such activities, excludes classroom training. Examples: Marching, police call, formation, barracks detail, field sanitation.

Special hazards areas
Areas identified containing hazards which due to their nature could not be eliminated through design selection and therefore depend upon training, procedures and PPE for control of the hazards to tolerable levels. Examples are paint booths, kitchens, machine shops, areas around conveyor belts, hazardous chemical storage areas, and so forth.

Special use airspace
Airspace of defined dimension identified by an area on the surface of the earth wherein activities must be confined because of their nature and or wherein limitations that may be imposed upon aircraft operations that are not a part of those activities.

Sports
Includes activities associated with sports, regardless of whether the participation is on–duty or off–duty, Army supervised or unsupervised, excludes hobbies. Examples: racquetball/paddleball, handball, softball, tennis, soccer, baseball, basketball, football, volleyball, skiing, swimming, scuba diving, golf, boating, hunting, fishing, martial arts, canoeing.

Standards failure
Standards/procedures not clear or practical, or do not exist.

Supervisory
Activities associated with the management of personnel. Examples: Inspection tasks, directing workloads/work crews, monitoring work, crews, planning unit activities.

Surveillance
The observation, inspection, investigation, test, study, and classification of ammunition, ammunition components, and explosives in movement, storage, and use with respect to degree of serviceability and rate of deterioration.

Support failure
Inadequate equipment/facilities/services in type, design, availability, or condition, or insufficient number/type of personnel, which influenced human error, resulting in an Army accident.

Sustain the Force
One of the Army's four core capabilities. This capability includes the processes of acquiring, maintaining and sustaining equipment; maintaining and sustaining land operations; acquiring and sustaining infrastructure and operating installations.

System
A composite, at any level of complexity, of trained personnel, procedures, materials, tools, equipment, facilities, and software. The elements of this composite entity are used together in the intended operational or support environment to perform a given task or achieve a specific production, support, or mission requirement.

System inadequacy
A tangible or intangible element that did not operate to standards, resulting in human error or materiel failure. Also referred to as causes, readiness shortcomings and/or root causes.

System safety
The application of engineering and management principles, criteria, and techniques to optimize safety within the constraints of operational effectiveness, time, and cost throughout all phases of systems', equipment's, or facilities' life cycle.

System safety engineering
An engineering discipline requiring specialized professional knowledge and skills in applying scientific and engineering principles, criteria, and techniques to identify and eliminate hazards or reduce the risk associated with the hazards.

System safety lessons learned
A collection of real or potential safety or health-related problems based on data analysis or experience that can be applied to future and current systems to prevent similar recurrences.

System safety management
An element of management that defines the system safety program requirements and ensures the planning, implementation, and accomplishment of system safety tasks and activities consistent with the overall program requirements.

System safety management plan (SSMP)
A management plan that defines the system safety program requirements of the Government. It ensures the planning,

implementation and accomplishment of system safety tasks and activities consistent with the overall program requirements.

System safety program plan (SSPP)
A description of planned methods to be used by the contractor to implement the tailored requirements of MIL–STD–882D, including organizational responsibilities, resources, method of accomplishment, milestones, depth of effort, and integration with other program engineering and management activities and related systems.

System safety risk assessment (SSRA)
A document that provides a comprehensive evaluation of the safety risk being assumed for the system under consideration at the MDR.

System safety working group (SSWG)
A group, chartered by the PM, to provide program management with system safety expertise and to ensure communication among all participants.

Tactical facilities
Prepared locations with an assigned combat mission, such as missile launch facilities, alert aircraft parking areas, or fixed gun positions.

Tactical field operations
Two types— Actual— An active theater or area of combat operations; Simulated— An operational area established for training in which combat operations are simulated.

Technical tester
The command or agency that plans, conducts, and reports the results of Army development testing on behalf of the command or agency.

Technical tests
A generic term for testing which gathers technical data during the conduct of development testing, technical feasibility testing, qualification testing, Joint development testing, and contractor or foreign testing.

Test agency
An organization that conducts development tests or user tests.

Test/study/experiments
Activities associated with the conduct of tests, studies, and experiments on natural or man-made materiel or on human beings or animals for research projects. Examples: Preparing for test/study/experiment, performing test/study/experiment.

Tolerable risk
The level of risk associated with a specific hazard below which a hazard does not warrant any expenditure of resources to mitigate. From a legal standpoint it would be considered as a "de minimis" risk, from the Latin phrase "de minimis noncurat lex" meaning "the law does not concern itself with trifles."

Toxicity
The property possessed by a material that enables it to injure the physiological mechanism of an organism by chemical means, with the maximum effect being incapacitation or death.

Toxin
Toxic material of biologic origin that has been isolated from the parent organism. The toxic material of plants, animals, or microorganisms.

Training related death
A death associated with a non–combat military exercise or training activity that is designed to develop a military member's physical ability or to maintain or increase individual/collective combat and/or peacekeeping skills, and is due to either an accident or the result of natural causes occurring during or within one hour after any training activity where the exercise or activity could be a contributing factor. This does not apply to Army civilians participating in a wellness program.

Unexploded ordnance (UXO)
Ammunition and explosives that have been primed, fused, armed, or otherwise prepared for action and that have been fired, dropped, launched, projected, or placed in such a manner as to constitute a hazard to operations, installations, personnel, or materiel, and remain unexploded by malfunction, by design, or for any other cause. Unexploded ordnance is synonymous for the dud.

Unmanned aircraft systems (UAS)
Powered, aerial vehicles that do not carry human operators, uses aerodynamic forces to provide vehicle lift, can fly autonomously or is remotely operated, can be expendable or recoverable, and can carry a lethal or non–lethal payload. Ballistic or semiballistic vehicles, cruise missiles, unmanned aircraft rocket or rocket assisted launch, and artillery projectiles are not considered UAS.

User test
A generic term which encompasses testing which requires the use of user representative user troops and units for early user test and experimentation, force development test and experimentation, innovative tests, concept evaluation program tests, training effectiveness analysis tests, initial operational test and evaluation, follow–on operational test and evaluation, and Joint user tests.

Volunteers
Individuals who serve as unpaid assistants to facilitate the commander's ability to provide comprehensive, coordinated, and responsive services that support the readiness of Soldiers, Army civilians employees, and their families by maximizing technology and resources, adapting resources to unique installation requirements, eliminating duplication in service delivery, and increasing service effectiveness. An installation can have many types of volunteers, with each having specific guidelines that govern its management: statutory volunteers; individuals providing gratuitous service; volunteers for private organizations, and student interns.

Workplace
A place (whether or not within or forming part of a building, structure, or vehicle) where any person is to work, is working, for the time being works, or customarily works, for gain or reward; and in relation to an employee, includes a place, or part of a place, under the control of the employer (not being domestic accommodation provided for the employee).

Work–related injuries
Injuries or occupational illnesses incurred while performing duties in an on–duty status.

Worst single-hazard risk
Consequence/probability pair representing the highest system risk.

Vesicant agent
Blister agent.

Section III
Special Abbreviations and Terms
This section contains no entries.

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