Virginia Defense Force Pamphlet 385–10-1

Safety

# Virginia Defense Force Safety Program

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#### Safety

# **VDF Safety Program**

**Summary.** This document is an adaptation of the Department of the Army Pamphlet 385-10, Army Safety Program, for use by the units of the Virginia Defense Force (VDF). This pamphlet provides guidance to commanders and other personnel in regards to the safety program I the Virginia Defense Force.

**Applicability.** This pamphlet applies to units of the VDF. During mobilization for state active duty, procedures in this publication can be modified to support policy changes as necessary.

**Suggested Improvements.** Users are invited to send comments and suggested improvements directly to Headquarters, Virginia Defense Force, George Washington Division, Division Safety Office, 5001 Waller Road, Richmond, Virginia 23230-2915.

**Distribution.** Distribution is intended for all VDF units down to, and including, company-level.

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# Chapter 1 Virginia Defense Force Safety Program

# Section 1 Introduction

# 1-1. Purpose

- a. This pamphlet establishes mandatory guidance, functions, policies, and procedures for the VDF's Safety Program. The goal of this pamphlet and subsequent programs is to reduce the risk of death or injury to VDF personnel and damage to vehicles, equipment, and property due to accidents.
- b. This pamphlet also establishes requirements for safety and accident prevention programs for VDF facilities, provides guidance concerning public health and safety laws and regulations, and establishes procedures for compliance with the safety requirements of VDFR 385-10-series and other safety and health regulations.
- c. This pamphlet is organized to provide detailed guidance for selected chapters of VDFR 385-10-series. Each section of this pamphlet corresponds with a similar section of the regulation. When a chapter of VDFR 385-10 is not included in this pamphlet, that chapter has a unique pamphlet to addresses that topic.

# 1-2. References

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

# 1-3. Explanations and terms

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

#### 1-4. Functions

VDF Safety Program functions required of VDF units are addressed in VDFR 385-10-1.

# 1-5. Objectives

This pamphlet provides guidance on how to implement improved safety procedures and processes for the subject areas included in this pamphlet. This pamphlet provides guidance in recognizing units and individuals that make outstanding contributions to accident prevention efforts and acts. Through the implementation of this pamphlet, the safety and health of VDF personnel will be improved.

# Chapter 2 Goals and Strategic Planning

# 2-1. Introduction

- a. The first step in developing and implementing a safety program is to identify strategic goals and the plans required to achieve those goals, as required in VDFR 385-10-1.
- b. Goals for safety must be part of the command/organization's mission objectives. Safety goals will support overall command objectives by helping keep personnel safe and ready for duty. Through strategic planning each organization from Division Headquarters to the lowest level can determine what its goals for safety should be, and how best to achieve these goals.
- c. Strategic planning and goal setting has several benefits:
  - (1) First, by establishing realistic goals and the plan(s) to achieve these goals, the organization is oriented in the same direction. Disjointed operations, actions that do not contribute to plan implementation and goal achievement are controlled and eliminated, reducing waste of limited personnel and resources on nonproductive operations.
  - (2) Second, the process of establishing goals and strategic plans is positive since it should bring together all elements of the command/organization. Through working together to identify what is necessary for the command/organization to support VDF safety goals and associated plans, each element has improved understanding of its role in safety and occupational health and how each is essential to promoting overall objectives.
  - (3) Third, by determining overall strategy, the allocation of resources can be more efficiently managed. Personnel and programs can be applied to those areas with the greatest return.

# 2-2. Establishing appropriate safety goals

Safety goals are established by determining the requirements placed on the command/organization by higher level organizations (i.e., goals set forth by the Virginia Department of Military Affairs), internal requirements, and what is needed to serve customers (i.e., other organizations). Therefore, effective goals to achieve safe operations will be focused on the organization's mission.

- a. The Strategic Safety Plan.
  - (1) Safety goals will be prioritized to align the highest priority goals with regulatory requirements and VDF goals.
  - (2) Goals that directly affect the safety of personnel and directly support mission requirements will receive higher priorities.
- b. Goals that are attuned to an organization's mission, vision, goals, and capabilities are not set in a vacuum. Just as safety is the responsibility of all VDF personnel, so is the setting of goals for achieving safe operations and training activities. Safety goals are not set just by the safety office. Each organization within a command should be a full participant in the process. The commander will lead the effort with the safety professional serving as advisor and administrator.
- c. Each organization within the command will provide input to the safety goal setting process. A safety council/committee established by the commander and chaired by

- the commander or his/her Chief of Staff will have representation from organizations/units throughout the command.
- d. Goals for safety will be as simply stated as possible. Goals will focus on the issue being addressed without excessive and confusing language, being as specific as possible. All goals will have a target date established. By establishing a target date, emphasis is placed on actions to meet the date. Long-term goals should be set high, establishing requirements that are probably beyond immediate achievement, but that can be achieved within a specified period.
- e. Goals must be measurable. This is required for management to determine if progress is being made toward the goal.
  - (1) Safety goals will not contradict each other, or the mission of the command and other goals that may have been established.
  - (2) Goals will always be stated in a positive manner. Positively worded goals place the attention of the command on what is to be accomplished, not on what has gone poorly in the past.
  - (3) Finally, goals will be directed toward achieving a desired outcome. The goal will support VDF readiness by reducing personnel loss due to accidents, thereby maintaining individual and unit readiness.
- f. Goals must be approved by the commander and the chain of command and promulgated throughout the command. Every person in the command will be aware of the goals and their role in achieving each goal. The Safety Office will document the strategic goals and clarifying information, including minutes of meetings and summaries of documents.

# 2-3. Developing a strategic safety plan (SSP)

- a. Goals will not be achieved without a strategic plan that sets forth the process for each goal. SSPs are developed the same way that goals are developed, through command action and the involvement of all elements of the command. Each goal will be accomplished. To ensure that a plan is developed that is integrated with the VDF operational cycle, planning for the SSP will align with the fiscal year/budget cycle.
  - (1) Safety goals and SSPs will be developed for the current fiscal year and the next four years of the budget cycle.
  - (2) One result of the planning process will be the identification of any funding and personnel requirements to support the plan and goals and preparation of the budget documentation.
- b. Senior members of the command, representing all command elements, will participate in developing the SSP.

# 2-4. Resources

Leaders, commanders, managers, and supervisors are responsible for ensuring organization SSPs are identified and incorporated in to the VDF budget and personnel requirements to support VDF safety goals.

# 2-5. Review and evaluation

The commander will ensure that the SSP is implemented. This will be accomplished by ensuring that there are action plans (or work plans) for each goal and area of the plan. Specific tasks will

be assigned, milestones established and tracked, and progress will be regularly reported to the commander.

- a. Resource utilization will be part of the reporting process to verify that funds are being applies in a timely and efficient manner to the appropriate tasks. On a quarterly basis, or more frequently if required by the complexity of the plan or as determined by the commander, progress in achieving goals that will be reviewed by the commander.
- b. Any shortfalls in what is required, as identified in the budget and other documents, will be documented along with the projected impact of the shortfall on achievement of safety goals. When safety goals that seriously affect overall VDF goals are being breached, the status, the reason for the shortcoming, and recommended corrective action will be forwarded to the next level of command.

# Chapter 3 VDF Safety Program

#### 3-1. Introduction

An effective safety program requires a safety organizational structure that is capable of implementing Federal, State, and organizational level safety and occupational health (SOH) standards as well as any other requirements to reduce accidental risk to our resources. While each organization with the command must organize their safety program to suit the requirements, each safety organization must meet the requirements of this pamphlet.

# 3-2. Safety and occupational health manager.

- a. The individual assigned to the G.W. Division Safety Officer position will be the primary person responsible for planning, developing, coordinating, evaluating, and providing technical consultation for assuring implementation of the command's safety regulation.
- b. As a member of the commander's personal staff, the Safety Officer will:
  - (1) Make independent assessments to assist organizations within the command in integrating Federal, State, and organizational requirements to reduce risk of accidental losses.
  - (2) Have unimpeded access to senior commander to report status of safety program and provide safety technical assistance directly to the commander.
- c. Advise, plan, develop, coordinate, and evaluate the safety program by providing the following functions:
  - (1) Reports and gives advice to the commander on safety and occupational health (SOH) issues/policies.
  - (2) Assists all elements of the command in the implementation of the SSP in implementing their specific tasks.
  - (3) Manages and provides technical oversight of the safety program, including identifying the metrics that best measure progress on implementing the SSP and achieving the command's safety goals.
  - (4) Develops policy and procedures for integration of SOH, composite risk management (CRM), and accident prevention activities in the command.

# 3-3. Tailoring the safety organization

- a. The safety organization functions are an extension of the commander in the area of SOH
- b. The safety organization is responsible for five core safety functional areas and subfunctional areas to assist commanders in mission sustainment.
  - (1) Safety program management.
    - (a) Workplace safety (Occupational Safety and Health Administration OSHA).
    - (b) Systems safety.
    - (c) Radiation safety.
    - (d) Doctrine and leadership development.
  - (2) Inspection/assessments.
  - (3) Accident investigation/reporting.
  - (4) Promotion and awareness.

- (5) Hazard analysis and countermeasures.
- c. Each functional area is ideally administered by a qualified safety or additional duty safety officer.
- d. The organization chart at Figure 3-1 shows the standard Army recommended organization. The mission of the command and any facilities determines which functions are required in the safety organization. The magnitude of the mission also influences whether a particular function is required as a separate branch reporting to the Safety Officer or if the function can be incorporated into another branch or in the situation of smaller organizations, consolidated into the duties of one person not normally requiring a separate branch in the safety office structure.

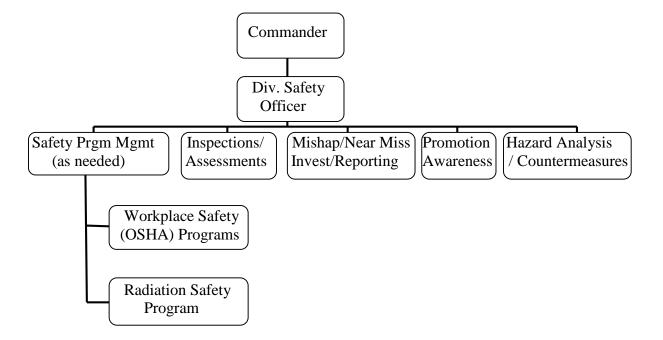


Figure 3-1, Standard core safety structure

e. In addition to the standard safety structure identified in Figure 3-1, there is also a requirement for activity safety personnel who perform the safety duty as an "other duty as assigned role." This individual should be referred to as the Additional Duty Safety Officer (ADSO) or Collateral Duty Safety Officer (CDSO). This usually occurs in activities where the table of organization and equipment / table of distribution and allowance / modified table of organization and equipment (TOE / TDA / MTOE) based on required functions/tasks does not support a full-time or primary duty safety officer. The person designated as the ADSO / CDSO will be of sufficient rank to perform these duties. Normally a commissioned or warrant officer at Battalion or higher unit levels and/or staff sergeant at company or detachment level. The appointment will be confirmed in orders designating the unit safety officer by name. The unit safety officer will have received, or will receive training for this position as soon as possible after assignment to the position.

f. Safety councils/ committers are established at each level of command and chaired by the commander.

# 3-4. Interface with other organizations

Safety is the responsibility of every member of the VDF. The safety organization works with other organizations to promote safety in the workplace and in off-duty activities and locations. The Division Safety Office must work with organizations within and outside of the command to achieve safety goals and implement the SSP.

- a. Within the command, the safety office will:
  - (1) Coordinate with other organizations in the development of command safety goals and program.
  - (2) Advise other organizations on implementation of the command safety program.
  - (3) Provide specific guidance to requests for assistance in resolving problems.
  - (4) Promote safety by providing training and educational programs to the DF community.
  - (5) Provide a safety inspection/audit function for the commander in the area of safety and occupational health.
  - (6) Identify units and organizational safety performance and achievement.
- b. Outside of the command, the safety office will:
  - (1) Coordinate on safety issues that affect multiple organizations.
  - (2) Report command status on implementing the SSP.
  - (3) Report progress on achieving safety goals (both internal and external).
  - (4) Support VDF and Department of Military Affairs safety goals and plans through an aggressive safety program.
- c. The safety office must also work with civilian authorities when accidents occur off of military installations / facilities to ensure that all critical information is obtained to ascertain the cause of the accident and all contributing factors.

# Appendix A References

Section 1. Publications

AR 385-10, Army Safety Program

AR 40-5, Preventive Medicine

Code of Federal Regulations (CFR) (http://www.gogpoaccess.gov/cfr/index.html)

DA Pam 385-1, Small Unit Safety Officer / NCO Guide

DA Pam 385-10, Army Safety Program

DA Pam 385-30, Mishap Risk Management

Section 2.

Forms

OSHA-2H Form, Notices of Unsafe and/or Unhealthful Working Conditions

OSHA Form 300, Log of Work-Related Injuries and Illnesses (http://www.osha.gov)

OSHA Form 300A, Summary of Work-Related Injuries and Illnesses (http://www.osha.gov)

VDF Accident Investigation Report Form

# Glossary

# Section 1 Abbreviations

ADSC – Additional Duty Safety Course

ADSO – Additional Duty Safety Officer (or NCO)

ANSI – American National Standards Institute

AR – Army Regulation

ARNG - Army National Guard

ASO – Aviation Safety Officer

CFR – Code of Federal Regulations

CPSC - Consumer Product Safety Commission

CPX – Command post exercise

CRM – Composite risk management

DA – Department of the Army

DA Pam – Department of the Army Pamphlet

DoD – Department of Defense

DoLI – Virginia Department of Labor and Industry (i.e., State OSHA)

DOT – Department of Transportation

EPA – Environmental Protection Agency

FAA – Federal Aviation Administration

FM – Field Manual

FOIA – Freedom of Information Act

GOV – Government Owned Vehicle

HAZMAT – Hazardous Materials

HSPG – Highway Safety Program Guidelines

JHA – Job hazard analysis

MIL-STD – Military Standard

MSDS – Material safety data sheet (see also SDS or safety data sheet)

NCO – Noncommissioned Officer

NFPA – National Fire Protection Association

NTSB – National Transportation Safety Board

OJT – On-the-job training

OSH – Occupational Safety and Health

OSHA – Occupational Safety and Health Administration

OSH Act – Occupational Safety and Health Act

POC – Point of Contact

POV – Privately Owned Vehicle

PPE – Personal Protective Equipment

RAC – Risk Assessment Code

RSO – Radiation Safety Officer

SDS – Safety data sheet (see also MSDS – MSDS being phased out by revision of OSHA Hazard Communications Standard)

SOH – Safety and occupational health

SOP – Standing Operating Procedure or Standard Operating Procedure

SSMP – Safety System Management Plan

SSP – Strategic Safety Plan

SSRA – Safety System Risk Assessment

TDY – Temporary Duty Assignment

USACHPPM – U.S. Army Center for Health Promotion and Preventive Medicine

VC – Vehicle Commander

VDF – Virginia Defense Force

# Section 2 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 and contingency operations due to safety and occupational health factors and other accident-based factors.

**Aircraft** – Flying machines, whether manned or unmanned, weight carrying structure for navigation of the air that is supported by the dynamic action of the air against its surfaces.

**Aircraft ground accident** – Injury or property damage accidents involving aircraft in which no intent for flight exists and the engine(s) is/are in operation.

**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.

**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 or, organizing, directing, coordinating and controlling forces for the accomplishment of assigned missions. This also includes responsibility for health, welfare, morale and discipline of assigned personnel in his or her "command."

**Competent authority** – An individual designated in command, responsible for the direction, coordination and control of personnel. The commander alone is responsible for everything his or her unit does or fails to do. They cannot delegate their responsibility or any part of it, although they may delegate portions of their 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 threat-based risks with accidental, hazard-based risks.

**Control** – Action taken to eliminate hazards or reduce their risk.

**Days away from work** – The actual or estimated number of days lost that the individual could not work, excluding the day of the injury / occupational illness. Count all calendar days including weekends and holidays.

**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.

**Engineering controls** – Regulation of facility operations using prudent engineering principles, such as facility design, operation sequencing, equipment selection, and process limitations.

**Environmental factors** – Environmental conditions, which had, or could have had, an adverse effect on the individual's actions or the performance of equipment.

**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.

**Evaluation** – A specialized inspection designed to determine the effectiveness of a unit's safety and health program.

**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.

**Extremely hazardous substances** – The EPA uses the term extremely hazardous substance for the chemicals that must be reported to the appropriate authorities of 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).

**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.

**Field operations** – Operations conducted outdoors or outside of man-made enclosures or structures. Short-term operations in storage structures are also considered as field operations.

**Firefighting** – Activities associated with developing or using firefighting skills.

**First aid** – First aid is defined as using a list of procedures that are all-inclusive and is not a recordable injury. If a procedure is not on the list, it is not considered first aid for recordkeeping purposes. The following are the procedures contained in the list:

- a. Using nonprescription medication at nonprescription strength. However, if an individual is provided prescription medications or nonprescription medications at prescription strength, this is considered medical treatment.
- b. Tetanus immunizations.
- c. Cleaning, flushing, or soaking surface wounds.
- d. Wound coverings, butterfly bandages, Steri-Strips. The use of wound closure methods such as sutures, medical glues, or staples is considered medical treatment.
- e. Hot or cold therapy regardless of how many times it is used.
- f. Nonrigid means of support.
- g. Temporary immobilization device(s) used to transport accident victims.
- h. Drilling of fingernail or toenail; draining fluid from blister.
- i. Eye patches.
- j. Removing foreign bodies from eye using irrigation or cotton swab. However, use of other methods to remove materials from the eye is medical treatment.
- k. Removing splinters or foreign material(s) from areas other than the eye by irrigation, tweezers, cotton swabs, or other simple means.
- 1. Finger guards.
- m. Massages. Massage therapy is first aid, but physical therapy or chiropractic treatment is considered medical treatment.
- n. Drinking fluids for relief of heat stress. (Drinking fluids for relief of heat stress is first aid, but administering an IV is medical treatment.)

**Flammable** – A material that has the characteristic of being easily ignited and burning readily.

**Ground accident** – Any accident exclusive of aviation (flight / flight-related / aircraft-ground).

**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 chemical** – OSHA uses the term hazardous chemical to denote any chemical that would be a risk to individuals if exposed in the workplace. Hazardous chemicals cover a broader group of chemicals than the other chemical lists.

**Hazardous wastes** – The EPA uses the term hazardous wastes for chemicals that are regulated under the Resource Conservation and Recovery Act (RCRA) (42 USC 6901). Hazardous wastes in transportation is regulated by DOT (49 CFR 170 through 49 CFR 179).

**Hazard class** – The United Nations Organization hazardous classification system, which contains 9 hazard classes, is used by the DOT for dangerous materials to identify the hazardous characteristics of the material(s).

# **Hazardous materials (HAZMAT)** – Definitions are:

- a. "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.
- b. 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.
- c. Any substance of material 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).
- d. 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 (ORM-E), both of which are regulated by the EPA, if their inherent properties would not otherwise be covered.

#### **Hazardous Substances** – Two form of definitions:

- a. 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.
- b. 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 the EPA. Hazardous substances, as used by OSHA, cover every chemical regulated by both DOT and EPA.

**Health hazard** – An existing or likely condition, inherent to the operation, maintenance, storage or disposal or materiel or a facility, that can cause death, injury, acute or chronic illness, disability, or reduced job performance.

**Health hazard assessment** – The application of biomedical and psychological knowledge and principles to identify, evaluate, and control the risk to the health and effectiveness of personnel.

**Hospitalization** – Admission to a hospital as an in-patient 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.

**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 accident.

**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.

**Independent evaluation** – The process used by the independent evaluators to independently determine if the system satisfies the approval 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.

**Individual risk** – Risk to a single exposed person.

**Inherent hazard** – An existing or permanent hazard (i.e., high voltage).

**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 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 regular work hours or the organization, except as special circumstances may require. It is also the process of determining compliance with safety and health standards through formal and informal surveys of workplaces, operations, and facilities.

**Investigation** – A systematic study of an accident, incident, injury, or occupational illness circumstance.

Laser - A device capable of producing a narrow beam of intense light (LASER = light amplification by stimulated emission of radiation).

**Life cycle** – The life of a system from conception to disposal.

**Maintenance / repair / servicing** – Activities associated with the maintenance, repair or servicing of equipment or other property. Excludes janitorial, housekeeping, or grounds-keeping activities.

**Medical treatment** – Medical treatment is the management and care of a patient to combat disease or disorder. It does not include:

- a. Visits to a physician or licensed health care professional solely for observation or counseling.
- b. Diagnostic procedures.
- c. First aid.

**Mishap risk management** – A component of CRM used to identify, evaluate, and prevent accidents to personnel, equipment, and the environment during peacetime and contingency operations due to safety and occupational health factors, design and construction of equipment, and other mishap factors.

**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 and/or air mission commander.

**Motorcycle** – Powered two- and three-wheeled vehicles, including mopeds and motorbikes.

**Near miss** – A potentially serious accident or incident that could have resulted in personnel injury, death, or property damage, damage to the environment and/or illness, but did not occur due to one or more factors.

**Note** – Additional information provided to expand understanding of the subject and to call attention to areas of interest.

**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 an 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** – VDF personnel are off-duty when they:

- a. When they are not in an on-duty status, whether on or off a VDF facility or military installation.
- b. Have departed official duty station or temporary duty station at termination of normal work schedule. (**NOTE**: For VDF personnel, this normally includes the one-way travel period to and from the individual's home of record and the duty location. It does not include travel time for multiple-day events other than the initial travel to and the final travel from the duty location.)
- c. Are participating in voluntary and/or installation team sports.
- d. Are on lunch or other rest break engaged in activities unrelated to eating and resting.

**On-duty** – VDF personnel are considered on-duty, for the purposes of accidents, when they are:

- a. Physically present at any location where they are to perform their officially assigned work. (This includes those activities incident to normal work activities such as lunch, coffee, or rest breaks. This does not include non-work related activities (e.g., working on a personal vehicle during work hours).
- b. Being transported by VDF owned or contracted vehicles for the purpose of performing officially assigned work. This would include initial travel to and from a drill or TDY location in a POV, but not daily transportation to or from a work location.
- c. Participating in compulsory physical training activities or other organization events.

**Operating vehicle** – Activities associated with operating vehicle under power. Examples: Driving, convoying / road marching, towing / pushing, mowing, hauling / transporting, driver testing, flying.

**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:

- a. Loss of teeth.
- b. Loss of fingernails or toenails.
- c. Loss of tip of fingers or toes without bone involvement.
- d. Inguinal hernia, if it is repaired.
- e. Disfigurement or 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 of, or the 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. Examples: Confidence courses, marches, running / jogging, physical training test.

**Probability** – Probability is the qualitative or quantitative likelihood of a particular event or sequence of actions initiated by a hazard-related Cause resulting in a Maximum Credible Loss. The Probability can be expressed as the product of the Incident Rate and Mishap Set Likelihood.

Qualified safety and health personnel – Includes personnel who have been primarily engaged in safety and occupational health specialties in the military or civilian occupations, have documented training within these areas (i.e., associates, bachelors, and/or masters degrees), and/or are qualified under the civil service classifications for safety, medical, occupational health, or industrial hygiene.

**Recommendations** – Those actions advocated to the command to correct system inadequacies that caused, contributed, could cause or contribute to a VDF accident. Also referred to in this regulation as corrective action, remedial measures and/or countermeasures.

**Recordable accident** – Reportable accident that meets the minimum criteria stated in the regulation for aviation and ground Class A-D accidents.

**Reportable accident** – All occurrences that cause injury, occupational illness, or property damage of any kind must be reported to the local safety office and to the VDF, G.W. Division Safety Office.

**Residual hazards** – Hazards that are not eliminated by design.

**Residual significant risk** – 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 the loss of effectiveness. 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 (e.g., light duty).

**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 by the probable dollar loss associated with the loss's severity. Note that risk has two dimensions – likelihood and magnitude, while a hazard has only one – 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 to be provided; or so restricts the performance that the assigned mission cannot be executed.

**Risk acceptance** – Risk acceptance is a formal and documented process indicating that 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 level** – Used to denote the level of risk a particular level of leadership may accept. These levels are based on the magnitude of the risk involved and the duration of the risk acceptance.

**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 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 the action and having the appropriate resources to control or eliminate the risk's associated hazard.

**Safety** – Freedom from those conditions that can cause death, injury, occupational illness, or damage to, or loss of, equipment or property.

**Safety objectives** – Criteria for comparing and judging measures for adequacy. Safety objectives incorporate the safest measures consistent with operational requirements.

**Security** / law enforcement – Activities associated with MP or other personnel performing security or law enforcement rescue duties. Examples: Traffic safety guarding / patrolling, controlling disturbances.

**Severity** – A qualitative or quantitative assessment of the degree of injury, occupational illness, property, facility, or environmental damage associated with a 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 reasonably 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 hearing protection** – Wearing either ear plugs or noise attenuating headsets.

**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: Kitchens, machine shops, areas around conveyor belts, hazardous chemical storage areas, etc.

Standards failure – Standards / procedures not clear or practical, or do not exist.

**Supervisory** – Activities associated with the management of personnel.

**Support failure** – Inadequate equipment / facilities / services in type, design, availability, or condition, or insufficient number / type of personnel, which influenced human error, resulting in a VDF accident.

**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 lesson 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 VDF or Government. It ensures the planning, implementation, and accomplishment of system safety tasks and activities consistent with the overall program requirements.

**Tolerable risk** – The level of risk associated with a specific hazard below which a hazard does not warrant any expenditure or resources to mitigate. From a legal standpoint it would be considered as a "de minimus" risk, from the Latin phrase "de minimus noncurat lex," meaning "the law does not concern itself with trifles."

**Training-related death** – A death associated with a non-combat type exercise or training activity that is designed to develop an individual's physical ability or to maintain or increase individual / collective 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 individuals participating in personal wellness or exercise programs.

**VDF accident** – A VDF accident is defined as an unplanned event, or series of events, which results in one or more of the following:

- a. Occupational illness to VDF personnel.
- b. Injury to on-duty VDF personnel.
- c. Damage to VDF property.
- d. Damage to public or private property, and/or injury or accident to non-VDF personnel caused by VDF operations (i.e., the VDF had a causal or contributing role in the accident).

**VDF property** – Any item of VDF property, or property leased by the VDF for which the VDF has assumed risk of loss, such as aircraft, vehicle, building, structure, system, etc.

**VDF Vehicle** – Any vehicle that is owned, leased, or rented by the Virginia Defense Force. 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, and buses.

**Workplace** – A place (whether or not within or forming a 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.

**Work-related injuries** – Injuries or occupational illnesses incurred while performing duties in an on-duty status.