Virginia Defense Force
Regulation 385–10-9

Safety

Virginia Defense Force
Safety Program
Sustaining Personnel

Headquarters
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Safety

VDF Safety Program

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

**Applicability.** This regulation 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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Sustaining Personnel
This part addresses the special VDF Safety Program management functions that are appropriate to sustaining personnel during training, field operations, and disaster operations. Sustaining personnel presents unique challenges due to the duties, intensity of some operations, and that situations involving state active duty may require activities for 24-hours a day for several days or weeks.

Chapter 1
Force Mobilization

1-1. Intent
This chapter establishes the minimum safety requirements for personnel into any environment during contingency operations. Therefore, CRM will be used to identify and control hazards.

1-2. Application of composite risk management
Operational conditions during contingency operations often impose significant risks to personnel, health, and equipment operation. When applying CRM, use mission, enemy, terrain and weather, troops, time available, and civil considerations information to systematically identify hazards. Army FM 3-0 may be used as a reference.

1-3. Standards
a. Safe operations come from enforcing standards during training and then applying them during actual operations. Therefore, VDF leaders will train to the standards and hold personnel under them accountable to follow during all operations.

b. A common deployment concern is that individuals abandon safety in an effort to complete a mission. Therefore, leaders are to ensure that the CRM process is incorporated into regulations, directives, SOPs, 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 personnel healthy and maintain their morale. This will be initiated by establishing a safety network and designating safety personnel at all levels.

d. Personnel will enforce standards and require their peers and all personnel to perform to standard in all operations.

1-4. 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 that personnel execute to standard throughout the operation (for example, strategies and procedures will be developed to address convoy operations, aviation operations, etc.).
1-5. Health Issues
   a. Personnel deploying to support contingency operations that take prescription medications should have enough medications for at least two weeks to take with them.
   b. Medical and environmental health threat briefings will be provided to personnel, as available, to make personnel aware of risks within the operations area(s).
   c. Personnel that are too unhealthy to be deployed are responsible to notify their supervisor or commander as soon as possible. Personnel requiring medical support to be deployed (i.e., wearing casts, recovering from surgery, etc.) will not be considered as deployable or available for state active duty, unless written clearance is obtained from their physician.

1-6. Post-Mobilization
Individuals returning from deployments or state active duty must ensure that any injuries or occupational illnesses obtained during such activities have been removed before coming off of orders.
Chapter 2
Tactical Safety

2-1. General
a. This chapter establishes the requirements for safety support during training and contingency operations. The tactical safety element is intended to reduce losses of manpower and equipment thus conserving operational effectiveness.
b. Composite risk management will be integrated into all contingency operations. Analyze all expected threat-based and hazard-based vulnerabilities to determine associated risk. Implement, enforce, and review appropriate control measures. Eliminate all hazards on a greatest risk first basis.

2-2. Preparation for contingency operations
Preparation for contingency 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.

2-3. Tactical order
All plans and orders will address CRM and safety management specific issues (Army FM 5-0 may be used as a reference). The results of the composite risk assessment and countermeasures will be integrated throughout the order, as applicable.

2-4. Safety personnel planning
Prior to contingency operations, all unit safety and additional 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 operations to meet and share experiences and lessons learned.
   c. Ensure that means of contacting each safety individual is in place.

2-5. 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 operations.
   c. Special safety requirements.
   d. Lessons learned from previous contingency operations.
   e. Procedures for reporting and responding to accidents.

2-6. Environmental hazards
The VDF policy is to conserve personnel by controlling preventable disease and injury 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 nonbattle-type losses have played a significant role in the outcome of contingency 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. Disease vectors.
   b. Contaminated food and water.
   c. Poor air quality.
   d. Heat.
   e. Cold.

2-7. Bivouac or shelter areas
Many accidents occur in bivouac or shelter areas and most are due to violation of existing standards and complacency. Commanders must enforce discipline in bivouac or shelter areas to minimize accidents and provide procedures for:
   a. Site selection.
   b. Sanitation.
   c. Generators.
   d. Feeding operations.
   e. Storage of flammables.
   f. Fire extinguishers.
   g. Grounding of portable electrical equipment / generators.
   h. Restriction and/or control of motor vehicles.

2-8. 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 3  
Aviation Safety Management

3-1. Introduction
This chapter:
  a. Establishes the safety component of protective aviation assets as an integral part of VDF aviation training and operations.
  b. Provides responsibilities, policies, and duties for the integration of safety and CRM into existing command processes.

3-2. Aviation safety policy
  a. Commanders, supervisors, and safety personnel at all levels will comply with the following policies regarding aviation safety. Safety will be a prime consideration in all mission and training planning and operations, including contingency operations. VDF 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 to correct shortcomings responsible for these conditions.
     2. Establish a written commander’s safety philosophy that contains current safety goals, objectives, and values, and includes the philosophy in annual training guidance.
     3. 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 (Army FM 5-19 may be used as a reference).
     4. Ensure mission after action reports are conducted to assess the effectiveness of CRM and safe performance.
     5. Ensure compliance with OSHA, National Fire Protection Association (NFPA), Environmental Protection Agency (EPA), and Federal Aviation Administration (FAA) 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 topics such as those subjected listed in Army Pamphlet 385-90.
     8. Ensure that ASOs are not assigned duties that are not related to the safety component of protecting aviation assets.
  b. Each aircrew member is ultimately responsible for ensuring his or her own safety and for expeditiously advising the pilot-in-command that an unsafe practice is occurring or is about to occur.
  c. Aviation asset operating under state active duty orders will be covered by an insurance program under the Virginia Department of Military Affairs (e.g., the Virginia National Guard). The following applies to aircraft and aircrew operating under state active duty orders:
(1) Aircraft:
   (a) Aircraft owned by VDF aviation members must have a current annual aircraft maintenance certification while under state active duty orders to be covered by the policy.
   (b) Aircraft leased by VDF aviation members must have documentation of a current annual aircraft maintenance certification available from the leasing agency.
   (c) Aircraft without documentation of a current annual aircraft mechanical inspection will not be flown or covered under state active duty orders.

(2) Aircrew (pilots and copilots). Personnel performing duties as pilot-in-command or as a co-pilot must possess at the time of being under state active duty orders:
   (a) Valid FAA-issued pilot’s license.
   (b) Valid and current FAA medical certificate (FAA Class medical must be equal to or greater than what is required for existing pilots license and type of flying being performed).
   (c) If the individual’s original FAA pilot’s license is older than two years, documentation of a current Biennial Flight Review (BFR) in the individual’s logbook.

(3) Aircrew members without complete FAA required documentation for pilots will not perform aviation duties as either a pilot-in-command or as a co-pilot under state active duty orders. However, the individual(s) may perform duties as an observer aircrew member.

3-3. Safety meetings
Safety meetings will be conducted on a quarterly basis.

3-4. Operational hazard
An operational hazard is any condition, action, or set of circumstances that comprises the safety of VDF aviation aircraft, associated personnel, airfields, or equipment. Operational hazards should be corrected at the lowest level possible. Operational hazards include inadequacies, deficiencies, or unsafe practices.
Appendix A

References

Section 1.
Publications

AR 40-5, Preventive Medicine

AR 95-1, Flight Regulations

AR 190-5, Motor Vehicle Traffic Supervision


29 CFR 1910.165, Employee Alarm Systems

29 CFR 1910, Subpart I, Personal Protective Equipment

29 CFR 1910, Subpart L, Fire Protection

40 CFR, Protection of the Environment

42 CFR, Public Health

49 CFR, Transportation

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

DA Pam 385-10, Army Safety Program

DA Pam 385-30, Mishap Risk Management

DA Pam 385-90, Army Aviation Accident Prevention Program

FM 3-0, Operations (http://www.apd.army.mil)

FM 4-01.011, Unit Movement Operations

FM 5-0, The Operations Process

FM 5-19, Composite Risk Management (CRM)
FM 21-60, Visual Signals

IATA (International Air Transport Association), Dangerous Goods Regulations, Restricted Articles Tariff 6-D. (http://www.iata.org/index)

ICAO (International Civil Aviation Organization) Web Site (http://www.icao.int)


NIMS (National Incident Management System) (http://www.fema.gov)

NRF (National Response Framework) (http://www.fema.gov)

Section 2.
Forms

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)
AR – Army Regulation
ARNG – Army National Guard
ASO – Aviation Safety Officer
ATV – All-terrain vehicle
BBP – Bloodborne pathogens
BBPECP – Bloodborne Pathogen Exposure Control Program
BBPP – Bloodborne Pathogen Program
CFR – Code of Federal Regulations
CG – Commanding General
CPX – Command post exercise
CRM – Composite risk management
DA – Department of the Army
DA Pam – Department of the Army Pamphlet
DoD – Department of Defense
DoDD – Department of Defense Directive
DoDI – Department of Defense Instruction
DoLI – Virginia Department of Labor and Industry (i.e., State OSHA)
DOT – Department of Transportation
DRU – Direct reporting unit
EO – Executive Order
EPA – Environmental Protection Agency
FAA – Federal Aviation Administration
FM – Field Manual
GFE – Government furnished equipment
GFP – Government furnished property
GOV – Government Owned Vehicle
HAZMAT – Hazardous Materials
HSPG – Highway Safety Program Guidelines
IATA – International Air Transport Association
IACO – International Civil Aviation Organization
MIL-STD – Military Standard
NCO – Noncommissioned Officer
NFPA – National Fire Protection Association
NTSB – National Transportation Safety Board
OSH – Occupational Safety and Health
OSHA – Occupational Safety and Health Administration
OSH Act – Occupational Safety and Health Act
PL – Public Law
POC – Point of Contact
POV – Privately Owned Vehicle
PPE – Personal Protective Equipment
SOH – Safety and occupational health
SOP – Standing Operating Procedure or Standard Operating Procedure
TDY – Temporary Duty Assignment
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.

**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.

**Emergency** – An event for which an individual perceives that a response is essential to prevent or reduce injury or property damage.

**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.

**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.

**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. Short-term operations in storage structures are also considered as field operations.

**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.

l. 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.)

**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.

**Foreign object damage (FOD)** – Damage to VDF vehicle/equipment/property as a result of objects alien to the vehicle/equipment damaged. Excludes aircraft turbine engines defined as a FOD incident.

**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 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.

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).

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. Intent for flight is the physical act of applying power to move the aircraft, not the thought process of the crew member as to what is going to occur in the future.
Maintenance / repair / servicing – Activities associated with the maintenance, repair or servicing of equipment or other property. Excludes janitorial, housekeeping, or grounds-keeping activities.

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.

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 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.

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.

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.

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.

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 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.
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.

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.

**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.

**State OSHA official** – Investigator or compliance officer employed by, assigned to, or under contract to state OSHA / Commonwealth of Virginia Department of Labor and Industry.

**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.

**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.