Review Officer Guide

Civil Air Patrol

Safety

June 2022

Responsible Stewardship

The aim of CAP's safety program is to,

"Uphold the public's trust through a safety-minded culture, safe environment for our members, and responsible stewardship of our valuable resources."

This aim includes aspirational cues that guide the development and continuous improvement of the safety program and the members and staff that support it.

Every member has the right to a safe place that reasonably supports their wellbeing and peace of mind. Our partners that support our work – our members, donors, sponsors, the US Airforce, and more – must have the confidence that we are being responsible for the use and care of our resources.

The Safety Review process is a critical part of that aim and provides the necessary steps and outcomes that assures that members and resources are protected. As an assigned review officer, you are a key part of our Safety Assurance and Safety Risk Management pillars of CAP's Safety Management System. The work you do to determine what happened and what contributed to a safety significant occurrence leads to both individual and organizational continuous improvement.

[CAPSafety | Civil Air Patrol National Headquarters (gocivilairpatrol.com)](gocivilairpatrol.com)

Contents

Introduction

This guide will introduce you to the safety review process, including associated terms, requirements, and best practices. This guide supports CAPR 160-2, *Safety Reporting, Reviewing, and Action Planning* and the *Reviewing a Safety Significant Occurrence* Course.

Purpose. Safety reviews are not investigations. When conducting a safety review, you are looking for what contributed to a safety significant occurrence (SSO) and ways to reduce the future likelihood of a similar SSO.

Ideal Outcomes. Safety is one ideal outcome among many ideal outcomes for an activity.

- By integrating safety as one of several IDEAL outcomes for any activity, members become more holistically attuned to the interconnectedness of safety with other outcomes (example: how fun and minimizing the risk of injury or illness is connected – and how BOTH are IDEAL)

- No activity is without some safety risk – "zero" risk is not possible – however, when looked at holistically with all outcomes, are we reasonably doing all we can to maximize ideal outcomes while preventing negative safety outcomes or, if prevention isn't possible, reducing the chance of a member getting hurt or equipment being damaged to a minimum?

So, what ideal outcomes are we aiming for?

The answer is: Readiness, Reliability, and Credibility

- *Readiness* – is about the availability of prepared and qualified members and needed resources
- *Reliability* – is about the capacity to deliver on our promises of serving America's communities, saving lives, and shaping futures
- *Credibility* – is about the ability to produce the outcomes we intend to while, to a reasonable extent, keeping everyone safe and equipment undamaged

Safety is embedded in all these outcomes and is an integral part of ensuring we achieve them.

> *What are our ideal outcomes?*
>
> *Readiness – availability of prepared and qualified members and resources*
>
> *Reliability – capacity to deliver on our promises of serving America's communities, saving lives, and shaping futures*
>
> *Credibility – ability to produce the outcomes we intend to while keeping everyone safe and equipment undamaged.*

People First

People are at the heart of Civil Air Patrol. Without the time, talent, and treasure of people, we cannot be the organization we aspire to be. "People first" safety means that members embrace and practice safety as a personal value so that everyone aims to protect their own wellbeing AND the wellbeing of their fellow members. It also means we should focus on growth and learning in safety roles and leadership. Every person is capable of personal continuous improvement ***if they choose to learn*** from things that didn't work out as intended. "People first" also means we show how safety supports the ideal outcomes that are important to CAP's legacy and aspirations as an organization.

Safety Culture includes:

Reporting Culture

Just Culture

Learning Culture

Flexible Culture

Engaged Culture

Ideal Safety Culture

Reporting Culture. Reporting is vital and foundational to an ideal safety culture. Encouraging consistent and continuous reporting instills trust and reduces fear of speaking up. Members should have confidence that important information is both heard and acted upon. Members should never be afraid to speak up – it could save a life.

The characteristics and behaviors of the ideal reporting culture include:

- Members are aware of safety issues that should be reported
- Members are encouraged to report safety issues
- Members have a positive tendency to report safety issues

When we exhibit the ideal traits of a reporting culture, the ultimate outcomes are supported in the following ways:

- We ensure we are ready when safety issues get identified early to ensure the members and equipment are available and ready for the mission or activity
- We ensure we are reliable when reporting safety concerns when they are observed which helps us ensure we can complete the mission or activity by keeping safety top of mind throughout
- We ensure we are credible when safety issues are reported, and we use the data to add or improve safeguards that prevent injury, illness, or damage

Just Culture. In just culture, we treat each other fairly, and it is the opposite of blame culture. Consistently encouraging the right safety behaviors and correcting poor safety practices is the key to upholding the ideal just culture. Focusing on "who is responsible" reflects a blame culture, while working to discover underlying contributing and causal factors and correcting them reflects just culture.

The characteristics and behaviors of an ideal just culture include:

- Members understand acceptable and unacceptable behaviors
- Members are positively acknowledged for raising safety concerns
- Members cooperate fully in safety reviews and know they will be treated fairly
- Members are accountable for truly negligent actions (deliberate disregard)

When we exhibit the ideal traits of a just culture, the ultimate outcomes are supported in the following ways:

- We ensure we are ready by being fair and consistent, so members know what's expected, not just in word, but in deed
- We ensure we are reliable by focusing on contributing and causal factors (vs. who is responsible) which provides confidence to members that by applying good safety practices, we also support the integrity of our missions and activities
- We ensure we are credible by diligently correcting poor safety practices which demonstrates a strong commitment to protecting people and resources

Learning Culture. In an ideal learning culture, information is shared so members can learn from their experiences and the experiences of others. Learning is also the key to continuous improvement, both personally and organizationally. Encouraging members to talk about their experiences, including what they learned from them, helps others improve their performance which also improves safety.

The characteristics and behaviors of an ideal learning culture include:

- Members learn from errors and adjust behavior willingly
- Members observe leaders model learning and personal accountability
- Members share information about successful outcomes and learning experiences

When we exhibit the ideal traits of a learning culture, the ultimate outcomes are supported in the following ways:

- We ensure we are ready when safety information is shared because everyone benefits and can be on the lookout for things that keep members and equipment from being available for missions or activities
- We ensure we are reliable when every member embraces personal accountability for modeling and applying learning in every mission and activity where they participate
- We ensure we are credible when members adjust behavior willingly to correct unsafe practices because, in doing so, they build trust and confidence in not only their capabilities, but their commitment to CAP's core values

Flexible Culture. In an ideal flexible culture, members and the organization adapt to unforeseen circumstances. No one can predict how every situation will turn out, but when members can adapt quickly, they can deal more effectively with new or changing conditions. Encouraging members to keep safety top of mind in all missions and activities and to quickly address safety concerns in the moment, helps with continuity and resilience.

The characteristics and behaviors of an ideal flexible culture include:

- Members apply risk management routinely to activities of all types
- Members adapt easily to changing demands and unforeseen developments
- Members manage safety "obstacles" that impact operational continuity

When we exhibit the ideal traits of a flexible culture, the ultimate outcomes are supported in the following ways:

- We ensure we are ready by applying safety risk management (SRM) when planning all missions and activities so we can ensure that any issues get addressed beforehand
- We ensure we are reliable by adapting to changing conditions quickly with safety top of mind, so obstacles are overcome without compromising safety
- We ensure we are credible when we can point to mission and activity success that overcame operational challenges and maintained a safe outcome, so we build trust in our full range of capabilities

Engaged Culture. An ideal engaged culture simply means that everyone does their part. Without every member's participation in our safety practices, we leave gaps in the safeguards that keep people and resources safe. When everyone embraces safety as a personal value, they support the ultimate outcomes with safety integrated as a thread that weaves through all of them – not a standalone outcome that is separate or an added burden.

The key to engaged members is engaged leadership, and every member serving on a command team, or any other safety leadership role must do their part for safety to work and for these outcomes to be achieved.

Terms and Definitions

Safety Significant Occurrence. Any observed outcome that resulted in or could have resulted in damage to equipment or a facility, injury to a member, and/or a member illness.

NTSB Reportable Accident or Incident. 49 CFR Part 830 defines requirements for immediate and later reporting of aircraft accidents and incidents. Refer to this regulation for the most current and up to date requirements. All NTSB reportable accidents or incidents must be reported the National Operations Center per CAPR 160-2.

Damage. Any physical harm, breakage, marring, or any unintended change to a vehicle, aircraft, facility, or any other piece of real or personal property. This includes any damage to CAP property, regardless of the cause, or damage to private property that may occur during a CAP activity or mission.

Injury. Evidence of internal or external physical trauma or damage to the body and/or evidence of an aggravated pre-existing injury in the context of a CAP activity or mission.

Illness. Evidence of disease or sickness affecting the body or mind and/or evidence of an aggravated pre-existing illness occurring in the context of a CAP activity or mission.

Near Miss. An SSO that did not, but could have resulted in damage to equipment, injury to a member, and/or a member illness.

Event chain. A series of events culminating in a safety significant occurrence (SSO). Events are observable snapshots that reflect the facts that describe actions or inactions that led to an SSO.

Contributing factor. The human and/or non-human factors that contributed to a safety significant occurrence.

Causal factor. The factor or factors that are primarily responsible for a safety significant occurrence and, if addressed, could reduce its likelihood.

Human factor. Factors that contributed to an SSO which relate to interactions between humans and the elements of a system.

Non-human factor. Factors beyond human control such as equipment difficulties, natural disasters, and sabotage that cause damage, injury, or illness.

Review Officer Requirements

To be assigned to an SSO as a review officer, you must complete the "Reviewing a Safety Significant Occurrence" in AXIS LMS. The course covers the material in this guide and the applicable CAPSIS guides.

Verifying the Initial Report

The review officer must verify all information entered by the reporting member is accurate and complete. Check the following before finalizing the initial reporting phase:

- The account of the SSO is brief and contains no proper names or identifying information
- The date and location of the SSO are accurate
- The individuals involved or witnessed the SSO are listed, and that contact for any non-CAP members who were involved or who witnessed the SSO is referenced in the "Attachments" tab.
- Check to see if individuals have provided statements
- Verify that illness and injury information, as applicable are entered and accurate
- Ensure that witnesses are accurately labeled as such in the list of individuals
- Verify the mission and/or activity information is accurate and that any "Other" selections are appropriate
- Verify the resources involved is complete, if applicable, and that any damage accurately described
- Ensure persons involved are listed in the resource fields and their role(s) are accurately depicted
- Review the attachment tabs for photographs or other documents, as applicable

Collecting Information

Information is an essential part of the safety review process and provides the necessary elements for determining what happened, what contributed, and what may have caused an SSO. Sources of information include, but are not limited to, statements and interviews, records and other documents, and photographs and diagrams.

Statements and Interviews. Information provided by members involved in or who observed an SSO is an important step in helping you piece together what happened and what may have contributed.

- Members may provide statements in the CAP Safety Information System (CAPSIS) or via email. CAP members listed in the SSO report automatically receive an email providing them an opportunity to add a statement to the system.
- In some cases, you may want to interview a member who provided a statement to ask clarifying questions or to collect additional information.
- Some members may prefer talking with the review officer one-on-one vs. providing a statement. Be sure to take notes and include those in the Attachments tab in the SSO report.

Interviewing Cadets. Before interviewing a cadet, you must contact the parent(s) or guardian(s) and request their permission and invite them to attend.

- Parents may not be familiar with the SSO review process – take the time to explain the process to them and answer any questions they have
- Any information cadets provide is to be used to improve our mission and/or activity outcomes and enhance safety for our members and resources

Interviewing Guidelines. Gathering accurate information from people involved in and from those who witnessed an SSO is an important step in the reviewing process. Follow these guidelines during interviews.

- Interviews should be conversational and must not be conducted as an interrogation. Ask members to describe what happened and what led to the outcome.
- Keep interviews as brief as possible and monitor the member for any signs of stress or defensiveness. Take breaks, if needed.
- Interview as soon as possible, individually, and in private
- Gather information from people involved and/or witnesses at the site of the SSO, to the extent possible
- Be clear about the purpose of the review – to collect as much information about the hazards, sources of hazards, contributing factors, and causal factors that can be mitigated to improve on CAP's outcomes – safety included.
- Listen and avoid interrupting. Wait until a natural break in the person's information sharing to ask clarifying or follow up questions
- Ask open ended questions. Avoid leading questions with only yes or no responses.
- Ask for thoughts on what might have prevented this SSO
- Take notes and review key points with the interviewee to ensure information is accurate

Tactics to Avoid.

- Intimidation, blame, or prejudgment
- Jumping to conclusions
- Becoming emotionally involved
- Making promises that cannot be kept
- Recording interviews

Records and Documents. Collecting records and documents that may be relevant to an SSO help to create the event chain but may also provide relevant information about contributing or causal factors. Examples of records and documents to collect include, but may not be limited to the following:

Weather. Was weather a possible factor in the SSO? Did heat or cold play a role? What was the cloud ceiling or visibility? Was precipitation involved?

Risk Assessment. Was a risk assessment completed for the mission, activity, event, flight, etc.? If so, what hazards were noted and what controls were put in place? Were they adequate/inadequate safeguards?

Flight Release Checklist. Was the flight properly released by a Flight Release Officer? Was everything on the checklist covered?

Maintenance Records. Did the SSO involve a mechanical or equipment difficulty? If so, was the vehicle/aircraft properly maintained? Does it have a history of this kind of breakdown?

Safety Briefings. Was a safety briefing conducted prior to the sortie, activity, event, or task? What was covered? Was anything missed?

Photographs and Diagrams. Photographs can lend important context to other information collected. Consider the following when taking photographs or making diagrams.

- Photograph the surrounding area where the SSO happened.
- Photograph from a broad perspective first then photograph close-up details
- Draw a diagram of the site or obtain a map of the area

Constructing the Event Chain

This step answers the question, "What happened?" The event chain starts with the outcome and is then preceded by a series of observable events that led up to it. Each event should be described briefly as a series of snapshots. The events in the chain are derived from information collected from statements and interviews, documents and records, and photographs.

The event chain needs to only be as long as the number of events that are relevant to an SSO and may have contributed to the outcome. The event chain should contain only factual information and should never contain proper names, conclusions drawn, opinions, or speculative information.

At the "top" of the event chain is the SSO. Below the SSO are the descriptions of each event, in sequence, that led to the SSO. A good rule of thumb: if you could have video recorded it, it is an event. However, not all events are relevant to the SSO. This example shows a few relevant events associated with a sprained ankle.

Example of an SSO

Member sprained ankle.

Examples of preceding events:

Member stepped in a pothole

Member looking at phone

Member receives text

Member walking

Analyzing the Information

The SSO analysis process involves using the information collected to determine the contributing human and non-human factors and the causal factors that, if addressed, could mitigate the likelihood of a similar SSO. This process leads to a list of recommended mitigating actions that wing and region commanders then must evaluate and approve, return, revise, or decline. Returning, revising, or declining a recommended action must be accompanied by a written justification in CAPSIS.

The CAPSIS Safety Reviewing Guide contains the descriptions of each contributing and causal factor available in the CAPSIS dropdown menus. A Factors Analysis Worksheet is also available, if needed.

Contributing Factors.

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                  │      Etc.       │
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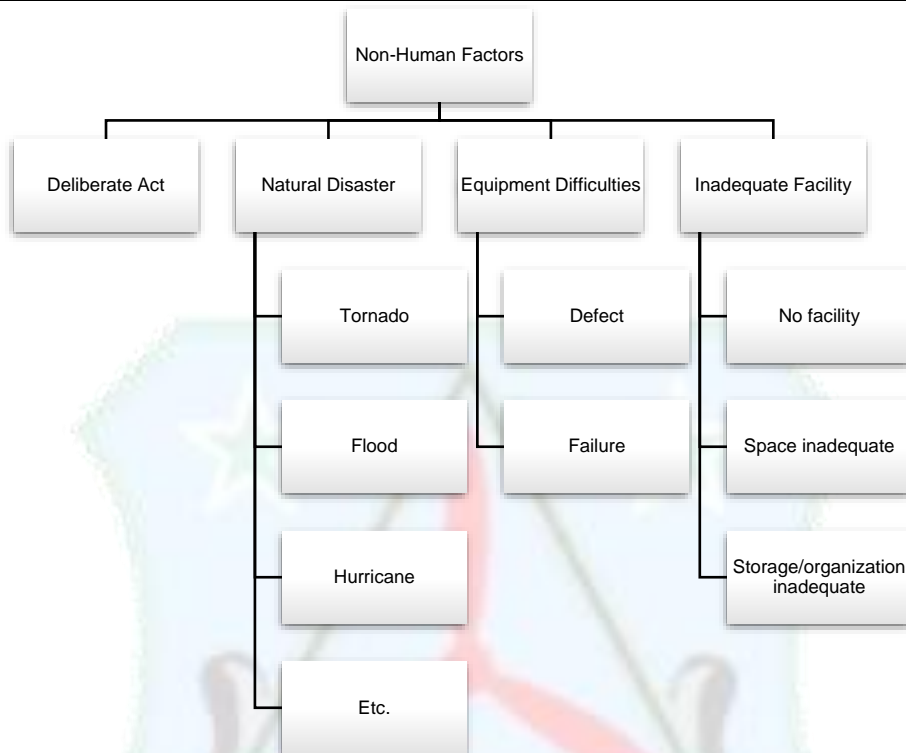
Deliberate Act. Deliberate acts are those that are committed with the full knowledge that they are contrary to established directives or were intended to cause harm or damage. If an SSO is the result of a deliberate act, the matter must be immediately referred to the commander for action.

Natural disaster. Damage or injury caused by weather or other environment conditions. Examples include tornado, flood, ice storm, hurricane, earthquake, wildfire, blizzard, lightning, etc.

Equipment difficulties. The following factors are applicable when equipment is determined to have been a factor in an SSO. Do not use these factors if there was equipment difficulty because of inadequate or non-existent maintenance (these fall under human factors).

- *Equipment defect.* A factor when equipment, components, instrumentation, or software was defective before it was installed.

- *Equipment failure.* A factor when a piece of equipment or a component malfunctions or is not operating properly.

Facility. Damage, injury, or illness that resulted because of an unavailable or inadequate facility either because of size or space or because of inadequate maintenance, storage, or organization.

- *Inadequate Facility.* Lack of a facility or lack of adequate size, storage, or organization.

- *Improper use of facility.* Use of a facility in a manner that was not intended.

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│ance   │ │& Decision│ │Environ- │ │& Techno-│ │logical   │ │State   │ │& Vigilance│ │         │
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│equipment   │ │aircraft/   │ │          │ │accomplish- │
│            │ │vehicle     │ │          │ │ment        │
│            │ │system      │ │          │ │            │
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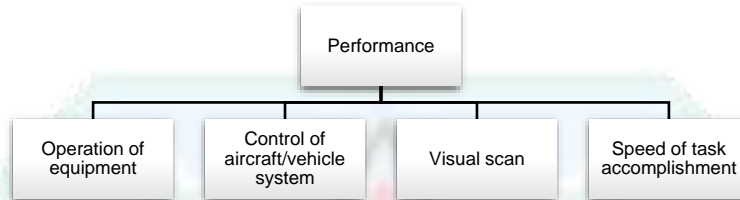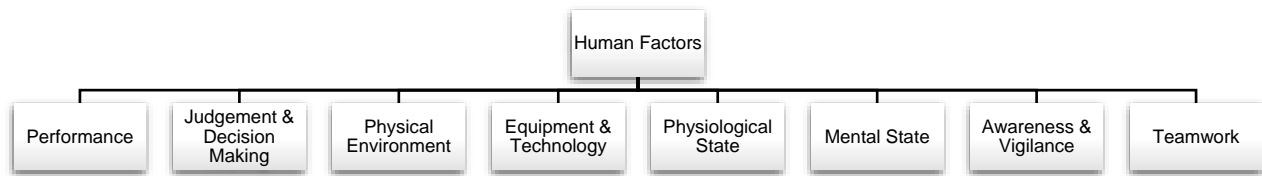
Performance. Actions performed in a manner that led to or could have resulted in an unsafe outcome

- *Operation of equipment* is a factor when an individual's movements inadvertently activate or deactivate equipment, controls, or switches when there is no intent to operate the control or device. This action may be noticed or unnoticed by the individual.

- *Control of aircraft/vehicle system* is a factor when an individual responds inappropriately to conditions by either over- or under controlling the aircraft/vehicle/system. The error may be a result of preconditions or a temporary loss of coordination.

- *Visual scan* is a factor when the individual does not effectively execute visual scan patterns.

- *Speed of task accomplishment* is a factor when an individual takes a necessary action as dictated by the situation but performs these actions too quickly or too slowly.

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                          │   Judgement &    │
                          │  Decision Making │
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│ Real-time risk│ │Prioritization of│ │Caution/warning│ │Choice of action│
│  assessment   │ │    tasks     │ │comprehension │ │during operation│
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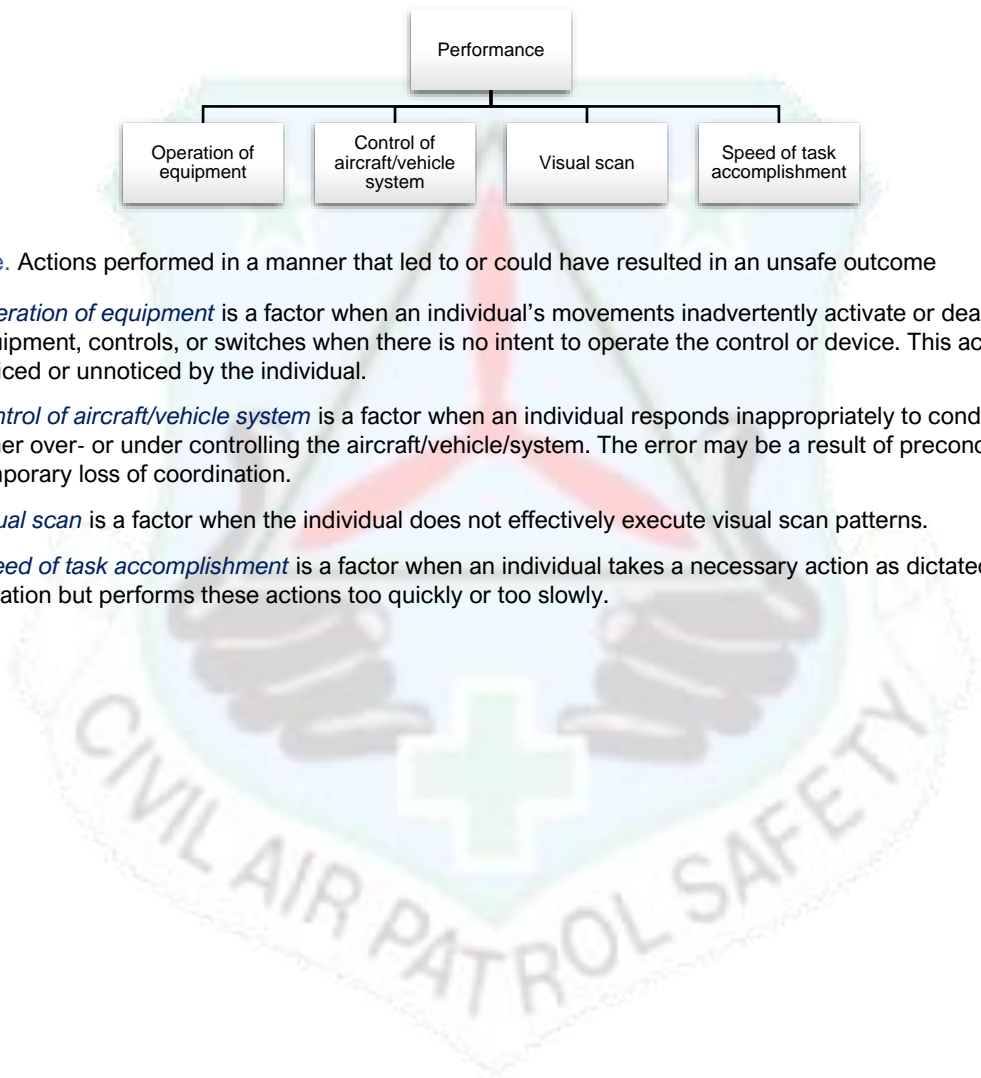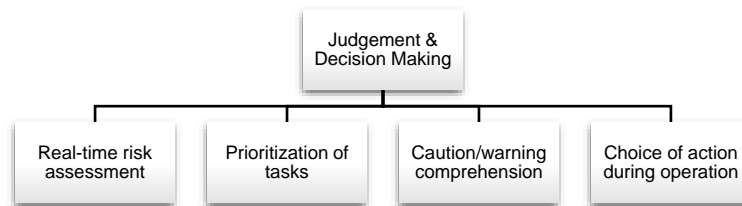
Judgement & Decision Making. Choosing and taking a course of action that was inadequate or inappropriate for the situation

- *Real-time risk assessment* is a factor when an individual fails to adequately evaluate the risks associated with a particular course of action and this faulty evaluation leads to inappropriate decision-making and subsequent unsafe situations

- *Prioritization of tasks* is a factor when the individual does not organize, based on accepted prioritization techniques, the tasks needed to manage the immediate situation

- *Caution/Warning comprehension* is a factor when a caution or warning is perceived and understood by the individual but is ignored by the individual.

- *Choice of action during an operation* is a factor when the individual, through faulty logic or erroneous expectations, selects the wrong course of action.

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                          │   Environment    │
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│Factors  ││Heat/cold││Lights of││ Noise   ││  Wind   ││Wet/slick│
│affecting││ stress  ││oncoming ││interfer.││(vehicle ││conditions│
│ vision  ││         ││         ││         ││ only)   ││         │
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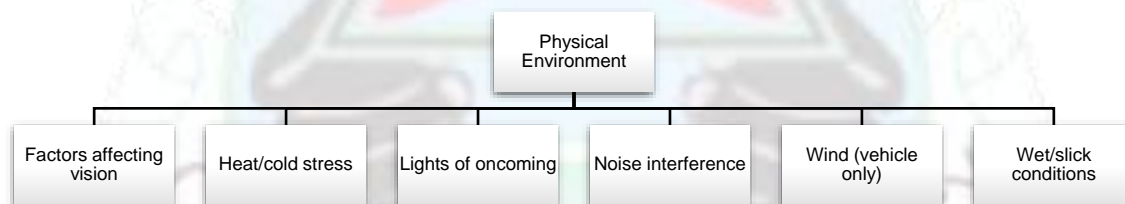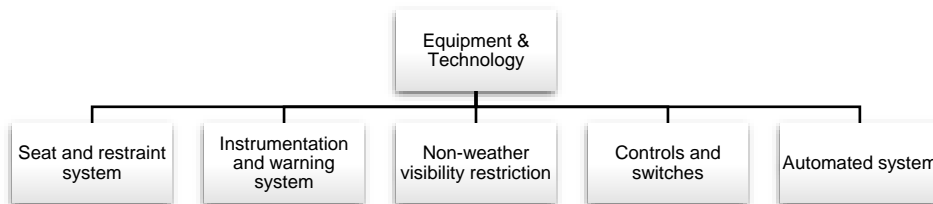
Physical Environment. Environmental conditions such as weather, atmospheric conditions, lighting, or noise affecting an individual's actions

- *Factors affecting vision* is a factor that includes obscured windows; weather, fog, haze, darkness; smoke, etc.; brownout/whiteout (dust, snow, water, ash or other particulates); or when exposure to windblast affects the individual's ability to perform required duties.

- *Heat/cold stress* is a factor when the individual is exposed to conditions resulting in compromised performance.

- *Lights of other vehicle/vessel/aircraft* is a factor when the absence, pattern, intensity, or location of the lighting of other vehicle/vessel/aircraft prevents or interferes with safe task accomplishment.

- *Noise interference* is a factor when any sound not directly related to information needed for task accomplishment interferes with the individual's ability to perform that task.

- *Wind (vehicle only)* is a factor when the intensity or direction of wind adversely impacts operation of a vehicle.

- *Wet/slick conditions* is a factor when wet of slick conditions contribute to vehicle damage or to an injury. NOTE: Do not use this factor for aircraft SSOs.

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                              Equipment &
                              Technology
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│ Seat and│  │Instrumentation│ │Non-weather│ │Controls and│ │Automated │
│restraint│  │and warning   │ │visibility │ │ switches  │ │ system   │
│ system  │  │ system       │ │restriction│ │          │ │          │
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Equipment and Technology. Automation or design affecting the actions of an individual.
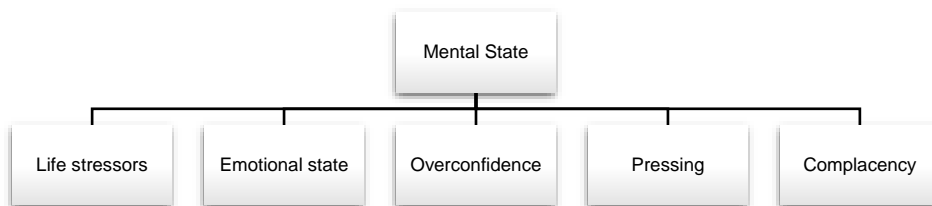
- *Seat and restraint system* is a factor when the design of the seat or restraint system, the ejection system or seat comfort has poor impact-protection qualities.

- *Instrumentation and warning system* is a factor when instrument factors such as design, reliability, lighting, location, symbology, size, display systems, auditory or tactile situational awareness or warning systems create an unsafe situation.

- *Non-weather visibility restriction* is a factor when the lighting system, windshield/windscreen/canopy design, or other obstructions prevent necessary visibility. This includes glare or reflections on the windshield/windscreen/canopy.

- *Controls and switches* is a factor when the location, shape, size, design, reliability, lighting or other aspect of a control or switch are inadequate.

- *Automated system* is a factor when the design, function, reliability, symbology, logic or other aspect of automated systems creates an unsafe situation.

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                          Physiological
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   │ Substance│   │ Fatigue  │ │Physical strength│ │Nutrition/diet/hydra│
   │          │   │          │ │and coordination │ │    tion        │
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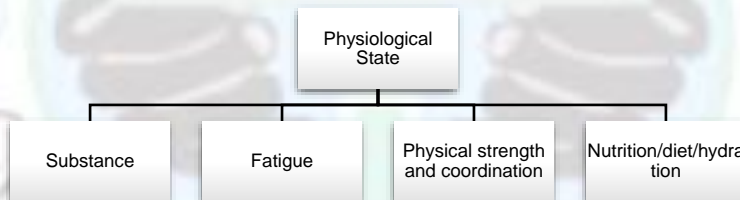
Physiological State. A non-optimal physiological condition that contributes to actions or behaviors that lead to damage or injury/illness.

- *Substance effect* is a factor when an individual uses legal or illegal drugs, supplements, energy drinks or any other substance with measurable effect that interfered with performance.

- *Fatigue* is a factor when diminished physical/mental capability resulting from chronic or acute periods of prolonged wakefulness, sleep deprivation, jet lag, shift work or poor sleep habits interfere with performance.

- *Physical strength and coordination* are a factor when the relative physical strength and/or coordination of the individual not adequate to support task demands.

- *Nutrition/Diet/Hydration* are a factor when an individual's nutrition, hydration, or dietary practices result in degraded performance.

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                          │ Mental State│
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│Life stressors││Emotional state││Overconfidence││ Pressing ││Complacency│
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Mental State. A non-optimal mental or emotional state, condition, or attitude that creates an unsafe situation.

- *Life stressors* are a factor when an individual's performance is affected by stressful life circumstances

- *Emotional state* is a factor when an individual is under the influence of a strong positive or negative emotion that interfered with a task

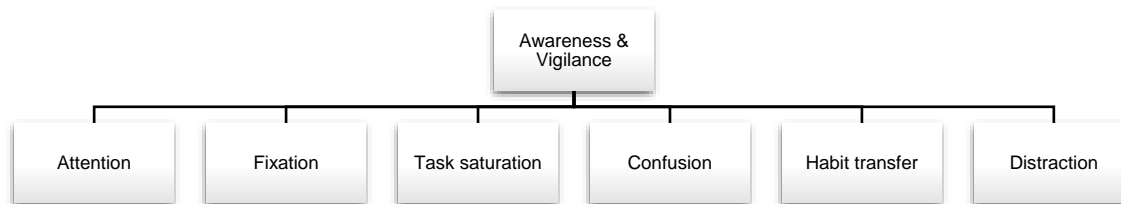- *Overconfidence* is a factor when an individual overvalues or overestimates personal capability, the capability of others or the capability of aircraft/vehicles or equipment

- *Pressing* is a factor when an individual knowingly commits to a course of action that excessively presses the individual and/or their equipment beyond reasonable limits (e.g., pushing self or equipment too hard)?

- *Complacency* is a factor when an individual succumbs to a false sense of security or ignores hazards

```
                       ┌──────────────┐
                       │   Sensory    │
                       │  Perception  │
                       └──────┬───────┘
      ┌────────────────┬──────┼────────────┬──────────────┐
┌──────────────┐┌──────────────┐┌──────────────┐┌──────────────┐
│Motion/Balance││Visual illusion││Perception of ││   Spatial    │
│   illusion   ││              ││  changing    ││disorientation│
│              ││              ││ environment  ││              │
└──────────────┘└──────────────┘└──────────────┘└──────────────┘
```
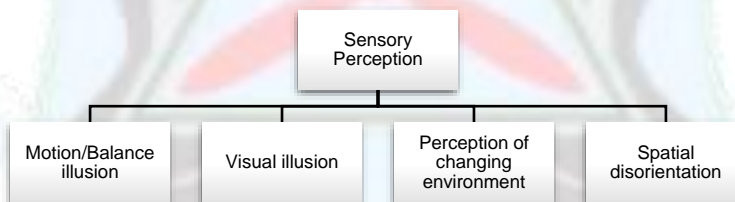
Sensory Perception. Degradation of visual, auditory, or vestibular senses that create the misperception or non-perception of a hazard.

- *Motion/Balance Illusion* is a factor when physical sensations of the ligaments, muscles, or joints cause an individual to become disoriented.

- *Visual Illusion* is a factor when visual stimuli result in an individual becoming disoriented

- *Perception of changing environment* is a factor when an individual misperceives or misjudges altitude, separation, speed, closure rate, road conditions, aircraft/vehicle location or other operational conditions.

- *Misinterpreted/Misread instrument* is a factor when an individual read an instrument indication incorrectly

- *Spatial disorientation* is a factor when an individual succumbs to forces that resulted in incorrectly sensing position, motion, or attitude of an aircraft/vehicle

```
                          ┌─────────────────┐
                          │   Awareness &   │
                          │    Vigilance    │
                          └────────┬────────┘
   ┌───────────┬───────────┬───────┼───────────┬───────────┐
┌──────┐   ┌──────┐   ┌──────────┐ ┌─────────┐ ┌──────────┐ ┌───────────┐
│Atten-│   │Fixa- │   │  Task    │ │Confusion│ │  Habit   │ │Distraction│
│ tion │   │ tion │   │saturation│ │         │ │ transfer │ │           │
└──────┘   └──────┘   └──────────┘ └─────────┘ └──────────┘ └───────────┘
```

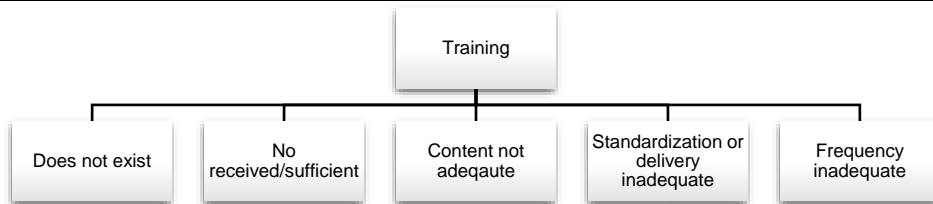**Awareness and Vigilance.** Attention management affecting individual performance in task accomplishment

- *Attention* is a factor when an individual's reduced state of alertness or readiness led to a perceived absence of a hazard

- *Fixation* is a factor when an individual's focus on a limited number of environmental cues to the exclusion of others

- *Task saturation* is a factor when the quantity of information or activities affect an individual's mental resources available for processing information

- *Confusion* is a factor when an individual experiences bewilderment, lack of clear thinking, or perceptual disorientation that led to their inability to maintain a cohesive and orderly awareness of events

- *Habit transfer* is a factor when an individual reverts to a previously learned behavior that was not appropriate for the task or situation

- *Distraction* is a factor when an individual experience an environment cue that led to an interruption of attention or a redirection of attention

```
                          ┌─────────────────┐
                          │    Teamwork     │
                          └────────┬────────┘
   ┌────────────┬───────────┬──────┼──────────┬──────────────┐
┌──────────┐ ┌──────────┐ ┌──────────┐ ┌────────────┐ ┌──────────────┐
│Crew / team│ │   Task   │ │Rank / position│ │Assertiveness│ │Mission/activity│
│leadership │ │delegation│ │ intimidation │ │            │ │planning/briefing│
└──────────┘ └──────────┘ └──────────┘ └────────────┘ └──────────────┘
```

Teamwork. Interactions among individuals, crews, and teams involved in the preparation and execution of a mission/sortie and/or activity that created a hazard.

- *Crew/Team leadership* is a factor when a crew/team leadership's actions or inactions lead to a breakdown in team/crew function or capability.

- *Task delegation* is a factor when a team's/crew's distribution of tasks lead to overloading on any individual member.

- *Rank/position intimidation* is a factor when an actual or perceived rank or role intimidation degrades individual or team/crew performance.

- *Assertiveness* is a factor when an individual's lack of assertiveness, persistence, or untimeliness results in critical information not being conveyed.

- *Mission/Activity Planning or Briefing* is a factor when an individual's or team's/crew's non-completion of preparatory tasks associated with the planning or briefing of a mission/activity contribute to an unsafe outcome.

Causal Factors

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                                    ┌──────────────┐
                                    │   Training   │
                                    └──────┬───────┘
        ┌──────────────┬───────────────┬───┴────────────┬──────────────┐
┌───────┴──────┐ ┌─────┴────────┐ ┌────┴──────┐ ┌───────┴──────────┐ ┌─┴──────────┐
│Does not exist│ │     No       │ │Content not│ │ Standardization or│ │ Frequency  │
│              │ │received/      │ │ adeqaute  │ │    delivery       │ │ inadequate │
│              │ │sufficient     │ │           │ │  inadequate        │ │            │
└──────────────┘ └──────────────┘ └───────────┘ └───────────────────┘ └────────────┘
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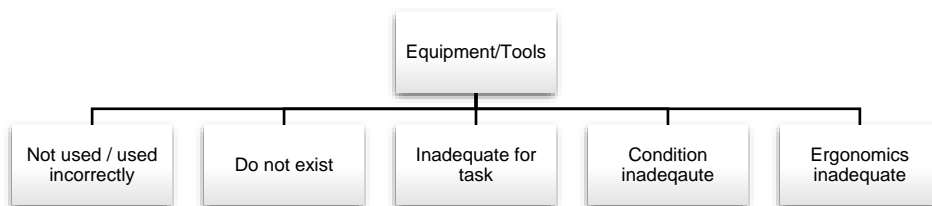
Training. The preparation or teaching needed to accomplish a mission, activity, or task successfully.

- *Training does not exist.* The necessary elements for preparing or teaching the individual(s) have not been previously published.

- *Training not received/sufficient.* The individual(s) involved did not received published required training or the training received was not sufficient for the individual(s).

- *Training content inadequate.* The current published training does not adequately prepare the individual(s) for a mission, activity, or task.

- *Training standardization or delivery inadequate.* The training used to prepare the individual(s) is inconsistent or is delivered in an ineffective way.

- *Training frequency inadequate.* The training used to prepare the individual(s) is delivered or completed often enough to assure mission, activity, or task success.
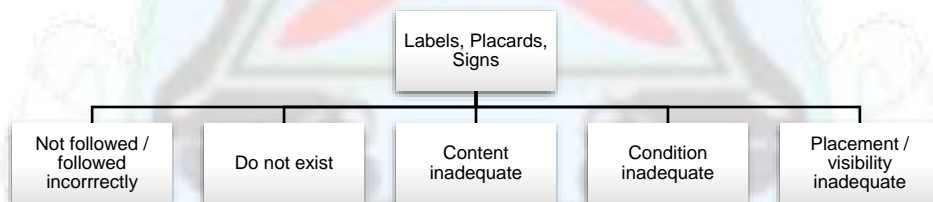
```
                                ┌──────────────┐
                                │Labels, Placards,│
                                │    Signs      │
                                └──────┬───────┘
    ┌──────────────┬───────────────┬──┴─────────────┬──────────────┐
┌───┴──────────┐ ┌─┴────────┐ ┌────┴──────┐ ┌───────┴──────┐ ┌─────┴──────┐
│Not followed /│ │Do not     │ │ Content   │ │  Condition   │ │Placement / │
│  followed    │ │exist      │ │inadequate │ │ inadequate   │ │ visibility │
│ incorrrectly │ │           │ │           │ │              │ │ inadequate │
└──────────────┘ └──────────┘ └───────────┘ └──────────────┘ └────────────┘
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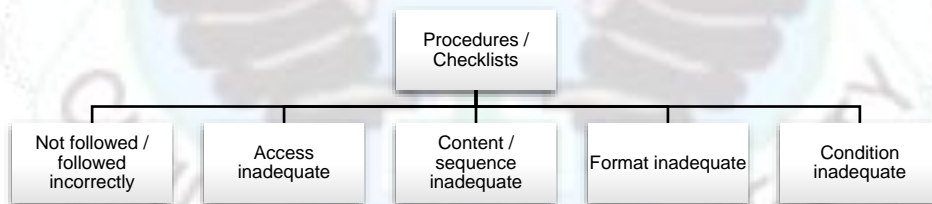
Labels/Placards/Signs. Physically posted instructions or guidance that should be available, visible, and in sufficient condition to be used effectively.

- *Labels/placards/signs not followed or were followed incorrectly.* Physically posted instructions or guidance were available but were not used or were used incorrectly.

- *Labels/placards/signs do not exist.* Physically posted instructions or guidance were not available but would have reduced the likelihood of the SSO

- *Labels/placards/signs content inadequate.* Physically posted instructions or guidance were available but the instructions or guidance is incomplete.

- *Labels/placards/signs condition inadequate.* Physically posted instructions or guidance were available but their physical condition rendered them unusable or ineffective.

- *Labels/placards/signs placement or visibility inadequate.* Physically posted instructions or guidance were available but posted in a location where they were not visible.

```
                            Equipment/Tools
   ┌──────────────┬──────────────┼──────────────┬──────────────┐
┌──────────┐ ┌──────────┐ ┌──────────┐ ┌──────────┐ ┌──────────┐
│Not used /│ │          │ │Inadequate│ │Condition │ │Ergonomics│
│used      │ │Do not    │ │for       │ │inadeqaute│ │inadequate│
│incorrectly│ │exist     │ │task      │ │          │ │          │
└──────────┘ └──────────┘ └──────────┘ └──────────┘ └──────────┘
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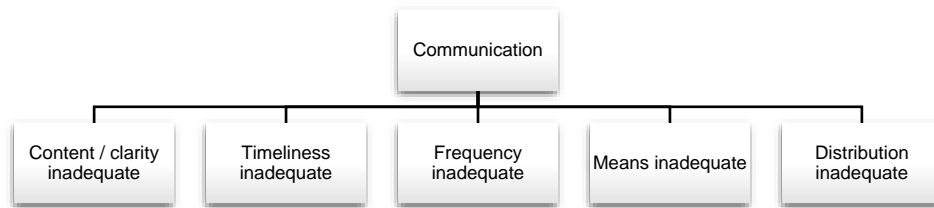
Equipment/Tools. The necessary implements for accomplishing a task.

- *Equipment/Tools not used or used incorrectly.* Available implements were used in a way that was contrary to instructed or acceptable use and caused or could have caused damage, injury, or illness.

- *Equipment/Tools do not exist.* A necessary implement for accomplishing as task was not available and led an individual to accomplish the task in some other way that caused or could have caused damage, injury, or illness.

- *Equipment/Tools inadequate for task.* Available implements used we not of adequate quality, strength, capacity, etc. to accomplish a task.

- *Equipment/Tools condition inadequate.* Available implements used were not in an adequate state of maintained readiness or repair to effectively accomplish a task.

- *Equipment/Tools ergonomics inadequate.* Available implements were not conducive to fit and comfort to be used effectively or caused or could have caused damage, injury, or illness.

- *Equipment/Tools malfunction/failure.* A piece of equipment, component of an aircraft or vehicle, or system malfunctioned or failed, leading to damage, injury, illness, or a near miss.

```
                           Procedures /
                           Checklists
   ┌──────────────┬──────────────┼──────────────┬──────────────┐
┌──────────┐ ┌──────────┐ ┌──────────┐ ┌──────────┐ ┌──────────┐
│Not       │ │          │ │Content / │ │          │ │          │
│followed /│ │Access    │ │sequence  │ │Format    │ │Condition │
│followed  │ │inadequate│ │inadequate│ │inadequate│ │inadequate│
│incorrectly│ │          │ │          │ │          │ │          │
└──────────┘ └──────────┘ └──────────┘ └──────────┘ └──────────┘
```

Procedures/Checklists. Published and accessible documents that contain important instructions, steps, or process guidance in order to successfully perform an operation or complete a task.

- *Procedures/Checklists not followed/Followed incorrectly.* Published and accessible documents were available but were not used or were used incorrectly.

- *Procedures/Checklists do not exist.* Published and accessible documents were not developed and available but would have reduced the likelihood of the SSO.

- *Procedures/Checklists access inadequate.* Documents were developed and published but were not accessible when needed to accomplish an operation or task.

- *Procedures/Checklists content or sequence inadequate.* Published and accessible documents were available, but their confusing content or poor sequencing rendered them unusable or ineffective.

- *Procedures/Checklists format inadequate.* Published and accessible documents were available but formatting, such as font size, shape, etc. rendered them unusable or ineffective.

- *Procedures/Checklists condition inadequate.* The physical condition of the published and accessible documents rendered them unusable.

```
                                    Communication

   Content / clarity      Timeliness        Frequency       Means inadequate    Distribution
     inadequate           inadequate        inadequate                          inadequate
```
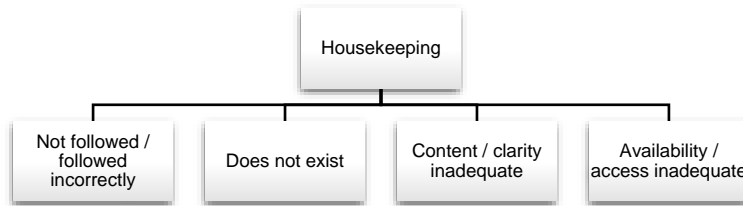
Communication. The written or verbal conveying of relevant information necessary to conduct an operation or task.

- *Communication content or clarity inadequate.* The content or clarity of communications was degraded to such a degree that the information was not understood or followed.

- *Communication timeliness inadequate.* The conveying of relevant information occurred at a time that was too early or too late to be understood and used effectively.

- *Communication frequency inadequate.* Relevant information is not conveyed frequently enough to be remembered and used.

- *Communication means inadequate.* The means for conveying relevant information does not reach its necessary audience.

- *Communication distribution inadequate.* The audience receiving relevant information is not broad enough or is incorrect.
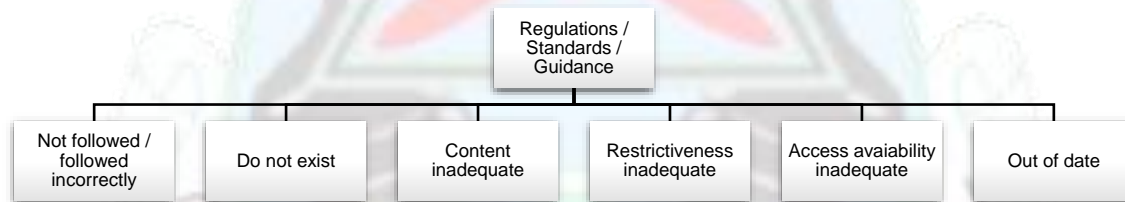
```
                              Regulations /
                               Standards /
                                Guidance

Not followed /     Do not exist     Content        Restrictiveness   Access avaiability   Out of date
  followed                          inadequate      inadequate         inadequate
 incorrectly
```
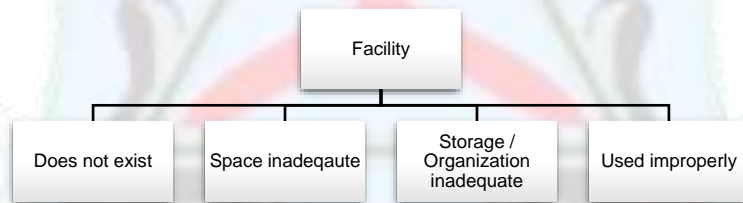
Regulations/Standards/Guidance. Published policy, standards, or non-directive publications that should be referenced as part of accomplishing a mission or activity.

- *Regulation/Standards/Guidance not followed/followed incorrectly.* Published policy, standards, or non-directive publications were available but were not used or were used incorrectly

- *Regulation/Standards/Guidance does do not exist.* Policy, standards, or non-directive publications do not currently exist but would reduce the likelihood of an SSO if they were.

- *Regulation/Standards/Guidance content inadequate.* Published policy, standards, or non-directive publications contained confusing or missing content that rendered them unusable or ineffective.

- *Regulation/Standards/Guidance restrictiveness inadequate.* Published policy, standards, or non-directive publications were not restrictive enough and are contributing to increased likelihood of an SSO.

- *Regulation/Standards/Guidance access availability inadequate.* Published policy, standards, or non-directive publications were not accessible when needed.

- *Regulation/Standards/Guidance out of date.* Published policy, standards, or non-directive publications are not current.

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                          ┌──────────────┐
                          │ Housekeeping │
                          └──────┬───────┘
         ┌───────────────┬───────┴───────┬───────────────┐
┌────────────────┐ ┌──────────────┐ ┌──────────────┐ ┌──────────────┐
│ Not followed / │ │Does not exist│ │Content/clarity│ │ Availability/│
│   followed     │ │              │ │  inadequate  │ │access inadequate│
│  incorrectly   │ │              │ │              │ │              │
└────────────────┘ └──────────────┘ └──────────────┘ └──────────────┘
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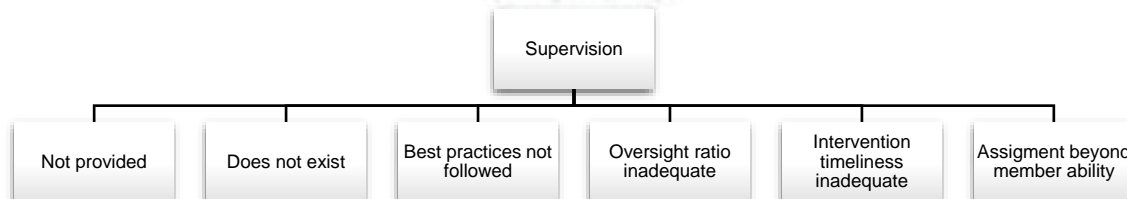
Housekeeping. The cleanliness or organization of a used space.

- *Housekeeping not followed/followed incorrectly.* The known or published protocols for effective cleanliness and organization were not followed or were followed in a way that led to an unsafe outcome.

- *Housekeeping does not exist.* Protocols for effective cleanliness and organization are not known or are not published but would reduce the likelihood of an SSO if they were.

- *Housekeeping content/clarity inadequate.* Known or published protocols for effective cleanliness or organization are confusing or missing relevant information to be used effectively.

- *Housekeeping availability/access inadequate.* The known or published cleanliness protocols are not conveyed or available for effective use

```
                          ┌──────────┐
                          │ Facility │
                          └─────┬────┘
         ┌───────────────┬──────┴───────┬───────────────┐
┌──────────────┐ ┌──────────────┐ ┌──────────────┐ ┌──────────────┐
│Does not exist│ │Space inadeqaute│ │   Storage /  │ │Used improperly│
│              │ │              │ │ Organization │ │              │
│              │ │              │ │  inadequate  │ │              │
└──────────────┘ └──────────────┘ └──────────────┘ └──────────────┘
```

Facility. A building or indoor/outdoor accommodation needed for a mission, activity, or task.

- *Facility does not exist.* A needed facility did not exist and contributed to an SSO.

- *Facility space inadequate.* The size of a facility was not sufficient.

- *Facility storage/organization inadequate.* The storage or organization available within the facility were not sufficient.

- *Facility used improperly.* Protocols or instructions involving the use of a facility were not properly followed or the facility was used in a way it was not intended.

```
                               ┌─────────────┐
                               │ Supervision │
                               └──────┬──────┘
     ┌──────────────┬──────────┬──────┴───────┬──────────────┬──────────────┐
┌──────────┐ ┌──────────┐ ┌──────────────┐ ┌──────────────┐ ┌──────────────┐ ┌──────────────┐
│Not provided│ │Does not exist│ │Best practices not│ │Oversight ratio│ │ Intervention │ │Assigment beyond│
│          │ │          │ │   followed   │ │  inadequate  │ │  timeliness  │ │member ability│
│          │ │          │ │              │ │              │ │  inadequate  │ │              │
└──────────┘ └──────────┘ └──────────────┘ └──────────────┘ └──────────────┘ └──────────────┘
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Supervision. The oversight or management of a mission, activity, or task or providing instruction or an evaluation of a team or individual in the accomplishment of an operation or task.

- *Supervision not provided.* Supervisor(s) available but were not scheduled or not present.

- *Supervision does not exist.* Requirements for supervision are not documented.

- *Supervision best practices not followed.* Acceptable supervision practices were not accomplished.

- *Supervision oversight ratio inadequate.* The available number of supervisors is not adequate to cover the range of participants.

- *Supervision intervention timeliness inadequate.* Supervisor(s) permitted an action or behavior to continue beyond a point to ensure a safe outcome.

- *Supervision assignment beyond member ability.* Supervisor(s) assigned a task that was not appropriate for a member's mental or physical capability.

Recommending Mitigating Actions

After determining the contributing and causal factors, review officers make recommendations to commanders for mitigating actions that could reduce the likelihood of an SSO. Mitigating actions are tied directly to the causal factors selected.

All recommended mitigating actions must include a justification that describes the rationale for the recommendations. Region and wing commanders and directors of safety may return recommended actions to the review officer for additional information or revisions.

Mitigation Actions

Natural Disaster. While natural disasters themselves are beyond human control, some mitigating actions may be possible to reduce the likelihood of harm or loss.
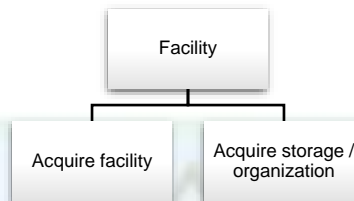
- *Acquire adequate facilities.* Relocate equipment or storing equipment in a protective /covered facility. Be sure to consider the other FACILITY factors when evaluating this factor.
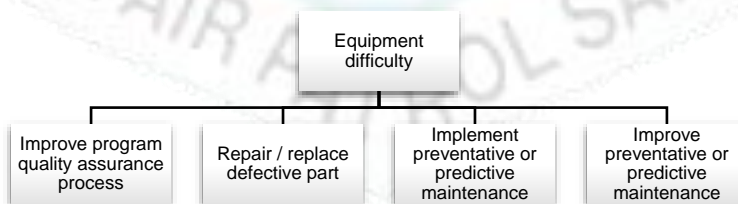
Equipment Difficulties. All aircraft equipment difficulties must be reported in AMRAD. Vehicle equipment difficulties should be reported to the unit/wing transportation officer. Refer to CAPR 160-2 regarding equipment difficulties that may be reportable to the National Transportation Safety Board (NTSB) and follow the associated directives.
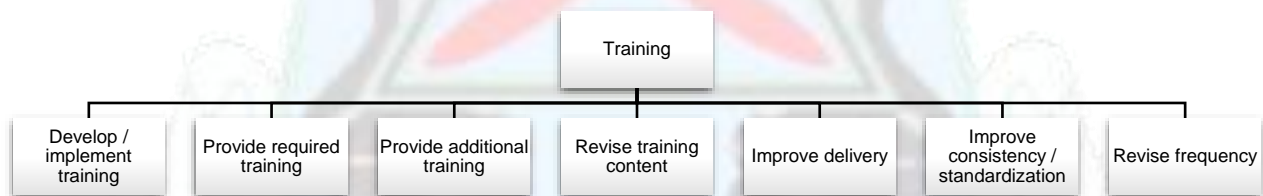
- *Improve program quality assurance process*. Review and revise equipment purchasing, handling, and/or storage requirements, especially if the problem is recurring.

- *Replace defective part.* Procure and replace a defective part with an appropriate replacement.

- *Implement preventive or predictive maintenance.* If requirements for preventive or predictive maintenance do not currently exist, consider recommending them they can be connected to the contributing of causal factors.

- *Improve preventive or predictive maintenance.* If the maintenance interval requirements for the equipment are inadequate, consider revising the requirements.
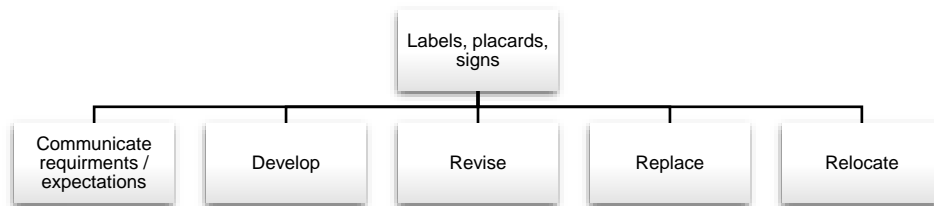

```
                          ┌─────────────┐
                          │  Facility   │
                          └──────┬──────┘
                       ┌─────────┴─────────┐
              ┌────────────────┐  ┌────────────────────┐
              │ Acquire facility│  │ Acquire storage /  │
              │                 │  │    organization    │
              └────────────────┘  └────────────────────┘
```

Facility. Damage or injury that resulted because of an inadequate facility either because of size or space or because of inadequate maintenance, storage, or organization.

- *Acquire a facility to meet the needs of a mission, activity, or task.* Consider this action when a facility was not available but if it had been, would have better protected people or equipment.

- *Acquire storage/organization.* Consider this factor when unavailable storage or organization equipment results in cramped, crowded, or obstructed space and represents a hazard
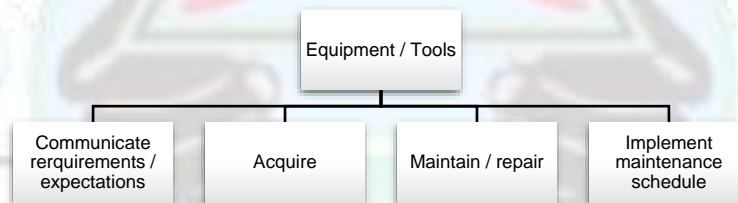

```
                                    ┌─────────────┐
                                    │  Training   │
                                    └──────┬──────┘
  ┌──────────┬──────────┬──────────┬───────┴──────┬──────────┬──────────────┬──────────┐
┌────────┐┌────────┐┌────────┐┌──────────┐┌──────────┐┌──────────────┐┌──────────┐
│Develop/││Provide ││Provide ││  Revise  ││ Improve  ││   Improve    ││  Revise  │
│implement││required││additional││ training ││ delivery ││ consistency /││frequency │
│training ││training││ training ││ content  ││          ││standardization││          │
└────────┘└────────┘└────────┘└──────────┘└──────────┘└──────────────┘└──────────┘
```

Training. The preparation or teaching needed to accomplish a mission, activity, or task successfully.

- *Develop and implement training.* This action can be focused very broadly to address widespread issues or focused on a specific group performing specialized tasks where training is needed but was not previously developed or implemented.

- *Provide required training.* Recommend delivering training that should have been delivered previously. Consider this action only when training was already in existence but, for whatever reason, was not delivered.

- *Provide additional training.* Consider this action when the training content, time, and frequency are generally adequate, but an individual or small group of people need additional training to address an area or topic.

- *Revise training content.* Consider this action when existing training is incomplete and needs additional content or time spent on a particular area or topic.

- *Revise the frequency of required training.* When the training required is sufficient in content and duration but is not delivered often enough, consider adjusting the time between training events.
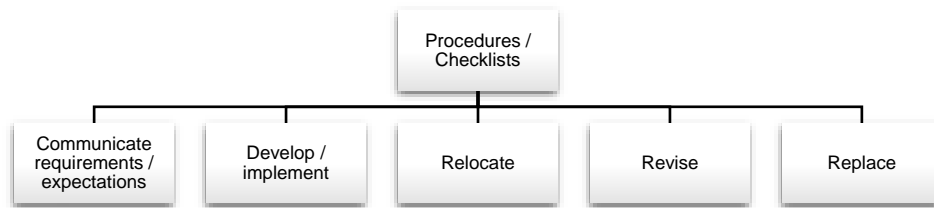
```
                            ┌─────────────────┐
                            │ Labels, placards,│
                            │      signs       │
                            └─────────────────┘
        ┌──────────────┬──────────┬──────────┬──────────┬──────────┐
  ┌───────────┐  ┌──────────┐ ┌──────────┐ ┌──────────┐ ┌──────────┐
  │Communicate │  │ Develop  │ │  Revise  │ │ Replace  │ │ Relocate │
  │requirments/│  │          │ │          │ │          │ │          │
  │expectations│  │          │ │          │ │          │ │          │
  └───────────┘  └──────────┘ └──────────┘ └──────────┘ └──────────┘
```

Labels/Placards/Signs. Physically posted instructions or guidance that should be available, visible, and in sufficient condition to be used effectively

- *Communicate requirements/expectations/best practices.* Consider this action to ensure individuals or groups are aware of requirements/expectations/best practices pertaining to adherence to labels/placards/signs. Be sure to also consider TRAINING factors, if applicable.

- *Develop a label/placard/sign.* If a label/placard/sign is needed, develop them and post. Consider including communications about the new label/placard/sign to ensure members are aware of them.

- *Revise the label/placard/sign.* Remove a label/placard/sign with incomplete or unclear content and post an adequate update.

- *Replace the label/placard/sign.* If the condition of the label/placard/sign renders it unreadable, post an adequate replacement.

- *Relocate the label/placard/sign.* Repost the label/placard/sign in a location where it will be more visible.
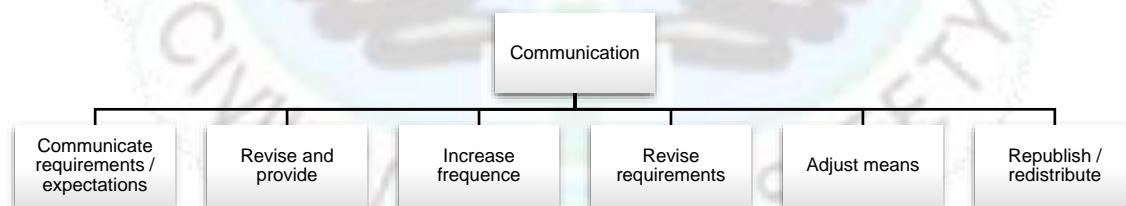
```
                          ┌─────────────────┐
                          │ Equipment / Tools│
                          └─────────────────┘
        ┌────────────┬──────────────┬──────────────┬──────────────┐
  ┌────────────┐ ┌──────────┐ ┌──────────────┐ ┌──────────────┐
  │Communicate  │ │ Acquire  │ │Maintain/repair│ │  Implement    │
  │rerquirements│ │          │ │               │ │  maintenance  │
  │/expectations│ │          │ │               │ │  schedule     │
  └────────────┘ └──────────┘ └──────────────┘ └──────────────┘
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Equipment/Tools. The necessary implements for accomplishing a task. This category does not include aircraft, vehicles, or trailers.
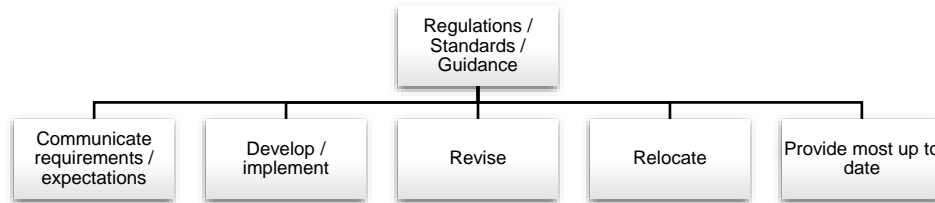
- *Communicate requirements/expectations/best practices.* Consider this action to ensure individuals or groups are aware of requirements/expectations/best practices pertaining to use of equipment/tools. Be sure to also consider TRAINING factors, if applicable.

- *Acquire needed equipment/tools.* Obtain equipment/tools needed. Consider including communications about new equipment/tool use to ensure members are aware of them.

- *Maintain or repair equipment/tools.* Consider this action when the equipment/tool is adequate but has not been well-maintained or kept in a usable state of repair.

- *Implement a maintenance schedule for equipment/tools.* Consider developing and implementing regular maintenance on equipment/tools to keep them in usable, working order

- *Acquire needed equipment/tools.* Obtain equipment/tools with appropriate ergonomics. Consider including communications about new equipment/tool use to ensure members are aware of them.

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                            ┌──────────────────┐
                            │  Procedures /    │
                            │  Checklists      │
                            └──────────────────┘
        ┌──────────────┬──────────────┼──────────────┬──────────────┐
┌───────────────┐ ┌───────────┐ ┌──────────┐ ┌──────────┐ ┌──────────┐
│ Communicate   │ │ Develop / │ │ Relocate │ │  Revise  │ │ Replace  │
│ requirements /│ │ implement │ │          │ │          │ │          │
│ expectations  │ │           │ │          │ │          │ │          │
└───────────────┘ └───────────┘ └──────────┘ └──────────┘ └──────────┘
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Procedures/Checklists. Published and accessible documents that contain important instructions, steps, or process guidance in order to successfully perform an operation or complete a task.

- *Communicate requirements/expectations/best practices.* Consider this action to ensure individuals or groups are aware of requirements/expectations/best practices pertaining to adherence to procedures/checklists. Be sure to also consider TRAINING factors, if applicable.

- *Develop and implement a needed procedure/checklist.* If a procedure/checklist is needed, develop and implement. Consider including communications or training about the new procedure/checklist to ensure members are aware of them.

- *Change location of procedure/checklist.* Consider this action if, for example, the procedure/checklist is difficult to locate or is not readily available when needed.

- *Revise the procedure/checklist.* Remove the existing procedure/checklist with incomplete, unclear, or poorly sequenced content and post an adequate update. Consider including communications about the revised procedure/checklist to ensure members are aware of them.

- *Revise the procedure/checklist.* Remove the existing procedure/checklist and post an adequate update in a more usable and effective format.

- *Replace the procedure/checklist.* If the condition of the procedure/checklist renders it unreadable, replace with an adequate replacement.

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                               ┌──────────────────┐
                               │  Communication   │
                               └──────────────────┘
     ┌──────────────┬──────────────┬──────┼──────┬──────────────┬──────────────┐
┌───────────┐ ┌──────────┐ ┌──────────┐ ┌──────────┐ ┌──────────┐ ┌──────────────┐
│Communicate│ │ Revise   │ │ Increase │ │  Revise  │ │  Adjust  │ │  Republish / │
│requirement│ │ and      │ │frequence │ │requirement│ │  means   │ │ redistribute │
│/expectatio│ │ provide  │ │          │ │   s      │ │          │ │              │
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Communication. The written or verbal conveying of relevant information necessary to conduct an operation or task.

- *Provide revised communication.* Revise and redistribute/redeliver communications to applicable audience(s).
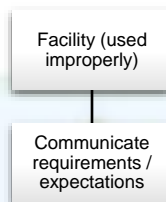
- *Communicate requirements/expectations/best practices.* Consider this action to ensure individuals or groups are aware of requirements/expectations/best practices pertaining to content and clarity of communication. Be sure to also consider TRAINING factors, if applicable.

- *Increase the frequency of communication.* Consider this action when communications need to occur more often over time to ensure members remember and use the information provided.

- *Revise communication requirements.* When a documented requirement for communication exists, consider revising the requirement to make communication more frequent.

- *Adjust the means of communicating information.* Change the means of communicating important information if the current means is not effective or adequate (e.g., email vs. in-person communication). Note: If the means of communication is related to EQUIPMENT, be sure to consider the EQUIPMENT/TOOLS factors.

- *Republish or redistribute communication to applicable audience.* Expand the distribution or delivery of information to a broader audience to which the information is applicable.

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                              ┌─────────────────┐
                              │  Regulations /  │
                              │   Standards /   │
                              │    Guidance     │
                              └─────────────────┘
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| Communicate requirements / expectations | Develop / implement | Revise | Relocate | Provide most up to date |

Regulations/Standards/Guidance. Published policy, standards, or non-directive publications that should be referenced as part of accomplishing a mission or activity.

- *Communicate requirements/expectations/best practices.* Consider this action to ensure individuals or groups are aware of requirements/expectations/best practices pertaining to adherence to regulations/standards/guidance. Be sure to also consider TRAINING factors, if applicable. Note: Deliberately disregarding a regulation or other mandatory requirement should be referred to the appropriate commander for action.

- *Develop and implement a needed regulation/standard/guidance.* If a needed, develop and implement a new regulation/standard/guidance. Consider including communications and/or training to ensure members are aware of them.

- *Revise the regulation/standard/guidance.* Revise the existing regulation/standard/guidance with missing or confusing content and post an adequate update. Consider including COMMUNICATIONS about the revision to ensure members are aware of them.

- *Revise the regulation/standard/guidance.* Revise the existing regulation/standard/guidance to include more restrictive content. Consider including COMMUNICATIONS about the revision to ensure members are aware of them.

- *Change location of regulation/standard/guidance.* Consider this action if, for example, the regulation/standard/guidance is difficult to locate or is not readily available when needed.

- *Provide/post most current regulation/standard/guidance.* Remove the out-of-date material and provide/post the most current revision.
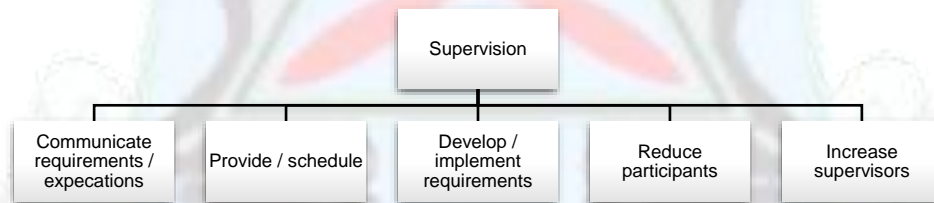
- *Communicate requirements/expectations/best practices.* Consider this action to ensure individuals or groups are aware of requirements/expectations/best practices pertaining to maintaining up to date regulations/standards/guidance.

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                              ┌─────────────────┐
                              │  Housekeeping   │
                              └─────────────────┘
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| Communicate requirements / expectations | Develop | Revise | Relocate |
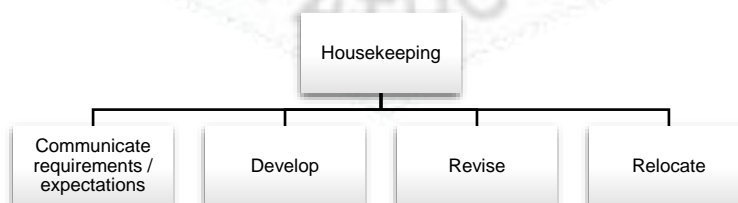
Housekeeping. The cleanliness or organization of a used space.

- *Communicate requirements/expectations/practices.* Consider this action to ensure individuals or groups are aware of requirements/expectations/best practices pertaining to housekeeping. Be sure to also consider TRAINING factors, if applicable.

- *Develop and implement housekeeping requirements/expectations/practices.* Consider this action when the cleanliness and organization of a space is needed to assure the safety of people and/or equipment.

- *Revise housekeeping requirements/expectations/practices.* Consider this action when existing housekeeping requirements/expectations/practices are unclear, poorly sequenced, or difficult to understand and apply.

- *Change location of housekeeping requirements/expectations/practices.* Consider this action if, for example, the requirements/expectations/practices is difficult to locate or is not readily available when needed.

Facility. A building or indoor/outdoor accommodation needed for a mission, activity, or task.

- *Communicate requirements/expectations/practices.* Consider this action to ensure individuals or groups are aware of requirements/expectations/best practices pertaining to proper use of a facility. Be sure to also consider TRAINING, FACILITY, and/or PROCEDURES/CHECKLIST factors, if applicable.

Supervision**.** The oversight or management of a mission, activity, or task or providing instruction or an evaluation of a team or individual in the accomplishment of an operation or task

- *Ensure supervisors are scheduled in mission/activity planning and are present.* Consider this action when members are available to supervise but were not scheduled in planning or were not present as requested.

- *Communicate requirements/expectations/practices.* Consider this action to ensure individuals or groups are aware of requirements/expectations/best practices pertaining to adequate supervision. Be sure to also consider TRAINING, REGULATIONS/STANDARDS/GUIDANCE, and/or PROCEDURES/CHECKLIST factors, if applicable.

- *Develop and implement needed supervision requirements.* If supervision requirements are needed, develop and implement. Consider including communications or training about the new requirements to ensure members are aware of them.

- *Communicate requirements/expectations/practices.* Consider this action to ensure individuals or groups are aware of requirements/expectations/practices pertaining to adequate supervision. Be sure to also consider TRAINING, REGULATIONS/STANDARDS/GUIDANCE, and/or PROCEDURES/CHECKLIST factors, if applicable.

- *Reduce the number of participants.* Revise the number of participants to match the number of available, committed supervisors.

- *Increase the number of supervisors.* Obtain additional supervisors

Determine the Office of Primary Responsibility (OPR). The OPR is the wing, region, or NHQ function that has the responsibility and necessary authority to consider and decide whether to direct or implement a recommended safety action. Questions about OPR determinations should be directed to your safety officer.

- *Wing.* For most SSOs, the wing will be the OPR, especially where the recommended actions pertain to individuals or local requirements and guidance.

- *Region.* When the region has responsibility for a mission or activity in which an SSO occurred, they will be the OPR for recommended actions involving individuals or local requirements and guidance.

- *NHQ.* Recommended actions that involve developing, revising, or implementing directive or non-directive material are generally NHQ responsibility. CAP/SE will review these recommendations and coordinate with NHQ functional directorates on next steps. NHQ will also be responsible for making recommendations that pertain to individuals involved in an NTSB or FAA reportable accident or incident.

Justification. Justification is a critical step that provides additional rationale for a recommended action. Include three basic elements in your justification: intent, action, and benefit. Example: *Improve equipment security* (intent) *by parking the vehicle in a secured garage* (action) *to reduce the likelihood of the vehicle being exposed to sabotage* (benefit).

- *Intent.* The basic objective or goal of a proposed action.
- *Action.* The specific action to be taken that addresses the contributing and causal factors and expected to meet the intent.
- *Benefit.* The expected benefit to an individual, mission, activity, and/or CAP if the action is accepted