



CAP REGULATION 160-2

30 September 2019

Safety

SAFETY REPORTING AND REVIEW

This regulation is in support of CAPR 160-1, *Civil Air Patrol Safety Program*, and prescribes the process of reporting and reviewing mishaps and hazards. Commanders have the overall responsibility for compliance with the procedures outlined in this regulation.

SUMMARY OF CHANGES.

This document replaces CAPR 62-2. It is an entirely new publication and should be reviewed in its entirety.

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1. Overview. The Civil Air Patrol (CAP) Safety Management System (SMS) is built around the concepts of identifying hazards, controlling risk, and assessing the effectiveness of the risk controls that have been put in place (see CAPR 160-1). A key component of that process is a commitment to report and analyze all mishaps, hazards, and other “near miss” occurrences to identify the hazards and control the risks which were revealed. Through this process CAP can identify previously undetected hazards and risks and put controls in place, as well as determine where existing risk controls need to be strengthened. This can only take place when the organization at every level exercises a strong commitment to reporting, review, and analysis of mishap information. Additional guidance on reporting and review processes may be found on the safety pages of the gocivilairpatrol.com website.

1.1. Reporting. The reporting of mishaps, observed hazards, and other hazard-revealing events is a key component of CAP’s commitment to identifying hazards which have the potential to increase risk to CAP members, CAP missions, and CAP assets.

1.2. Review. The thorough analysis and review of reported mishaps, identified hazards, and other significant events is an integral step to ensure hazards are identified, risks are assessed, and corrective actions are established to reduce the probability and severity of identified risks.

1.3. Prevention. Information obtained through reporting and review of mishaps, hazards, and other events will be used in conjunction with the Safety Risk Management (RM) and Safety Assurance (SA) pillars of the CAP SMS to ensure risks are properly controlled and the effectiveness of the selected controls are assessed as part of the CAP commitment to continuous improvement.

2. Waivers. The CAP Chief of Safety (CAP/SE) is the approval authority for all waivers to this regulation. Waivers must be coordinated through the applicable wing commander, region commander, and CAP-USAF liaison region and forwarded to CAP/SE who will coordinate with CAP-USAF/SE before a waiver determination is made.

3. Operating Instructions (OI) and Supplements to this Regulation. CAP/SE is the approval authority for all OIs, pamphlets, and supplements to this regulation. OIs, pamphlets, and supplements to this regulation cannot be issued below the wing level. Requests for approval must be coordinated through the applicable wing commander, region commander, and CAP-USAF liaison region and forwarded to CAP/SE who will coordinate with CAP-USAF/SE before a determination is made.

4. Roles and Responsibilities. It is imperative that all members cooperate and participate in efforts to learn from the circumstances surrounding any mishap or hazard-revealing event.

4.1. Commanders. Commanders at all levels will ensure members actively support and participate in the mishap and hazard reporting and review process.

4.1.1. To reinforce the positive reporting culture discussed in CAPR 160-1, the commander's focus must be on determining the factors that may have contributed to the mishap or hazard, with no attempt to assess fault or place blame on a member.

4.1.2. Commanders at every level must ensure that there is no negative stigma associated with reporting a mishap or hazard; rather members should be thanked for openly and honestly participating in the valuable process of identifying hazards and assessing risk.

4.1.3. Commanders, incident commanders (IC), activity directors, and all other CAP leaders will provide support and resources to their safety staffs to ensure they are able to perform all functions associated with reporting and reviewing mishaps and other events. Commanders are ultimately responsible for ensuring compliance with reporting and review requirements outlined herein.

4.2. Safety Officers (SE). In addition to the responsibilities outlined in CAPR 160-1, CAP SEs are responsible for overseeing the reporting and review processes, including the following:

4.2.1. SEs are their units' recognized experts in all reporting procedures and processes. SEs will assist members in reporting to ensure all required information is properly entered in the Safety Information and Reporting System (SIRS).

4.2.2 SEs will perform mishap reviews as assigned and assist other members conducting reviews. SEs will oversee the reporting process and mishap reviews on behalf of their commander. This includes wing and region SEs closely monitoring the progress of ongoing reviews to ensure timely completion and submission to CAP/SE (see paragraph 6.10.5.).

4.2.3. SEs will keep their commander apprised of the status of ongoing mishap reviews involving unit members or property and seek the commander's assistance when needed to encourage member participation in the information gathering and review processes.

4.2.4. SEs will assist commanders and other functionals (DO, AMO, CP, etc.) to implement and adjust risk controls and corrective actions based on lessons learned from mishap reviews and other hazard analyses.

4.3. Members. By participating in CAP activities and missions, CAP members agree to participate in the mishap reporting and review process. It is imperative that all members cooperate and participate in efforts to learn from the circumstances surrounding any mishap or unplanned event.

5. Mishap Reporting. A mishap is any occurrence or series of occurrences that results in damage or injury. Any damage or injury is evidence that a mishap has occurred, even if the precipitating occurrence or cause is not known. All mishaps must be reported.

5.1. General Definitions. The following definitions apply to all mishaps. Additional guidance on these terms in the context of different types of mishaps can be found in subsequent sections of this regulation. If there are any questions on whether a specific occurrence is considered a mishap, contact CAP/SE at safety@capnhq.gov.

5.1.1. Injury. For the purposes of mishap reporting, an injury is any occurrence of, or evidence of, physical trauma or damage to the body, either internal or external, that occurs in the context of a CAP

activity or mission. This context includes the activity itself as well as the planning, preparation, and travel associated with the activity.

5.1.2. **Damage.** For the purposes of mishap reporting, damage includes 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.

5.2. Mishap Reporting. Members at every level are responsible for reporting any mishap when they witness the mishap or see evidence that a mishap has occurred. This includes reporting to leadership as well as reporting in SIRS. Additional requirements for specific types of mishaps are included in subsequent paragraphs.

5.2.1. Whenever a mishap is observed, the member should ensure that it is called to the attention of the commander or any available member of the leadership staff (i.e., squadron commander, activity director, incident commander, SE, etc.).

5.2.2. SIRS reporting. The commander or the leader of the activity is responsible for ensuring the mishap is reported in SIRS in eServices as soon as possible after the mishap occurs.

5.2.2.1. All tabs and mandatory fields in the New Mishap section of SIRS must be completed within 48 hours of the mishap or the discovery of evidence that a mishap has occurred. The unit SE, or SE assigned to the activity where the mishap occurred, should verify all necessary information is gathered and entered properly. This includes entering all members involved in the mishap (including witnesses, pilot and all individuals on board a mishap aircraft, driver and all passengers in a mishap vehicle, etc.).

5.2.2.2. Commanders and SEs should be aware that the SIRS entries are a permanent record which must be filled out completely and accurately. They will ensure SIRS entries are reviewed for accuracy. In cases where information was entered in error and must be corrected, contact CAP/SE at safety@capnhq.gov

5.3. Internal Mishap Reporting. It is imperative that wing and region leadership is informed of mishaps on a timely basis. To facilitate this process, each region will develop standardized internal reporting procedures for their region. These procedures will be published in the form of a region supplement to this regulation and will be in addition to the required SIRS reporting outlined in paragraph 5.2. The supplement will be developed and coordinated in accordance with paragraph 3.

5.3.1. The supplement will include a process to ensure the wing and region commanders and their respective directors of safety are promptly notified of all mishaps within the region/wing.

5.3.2. The supplement will include a process for ensuring prompt notification of CAP-USAF personnel with oversight of the region/wing.

5.3.3. In accordance with CAPR 1-2(I), *Personally Identifiable Information*, the supplement must not contain Personally Identifiable Information (PII) for any member.

5.4. Aircraft Mishap Reporting. This section provides guidance for SIRS reporting of mishaps associated with aircraft operations.

5.4.1. Any mishap involving a CAP aircraft, or a member-owned aircraft used in a CAP mission or activity, will be reported as an aircraft mishap in SIRS. This includes powered aircraft, gliders, and balloons.

5.4.2. Any injuries resulting from an aircraft mishap, including aircrew, passengers, or other individuals not in the aircraft, will be reported as part of the aircraft mishap report.

5.4.3. Any aircraft or property damage, or injury, that results from the ground movement of an aircraft will be reported as an aircraft mishap.

5.4.4. Any aircraft damage that is discovered during a preflight, or any other time that is not associated with flight, will be reported as an aircraft mishap even when the cause of the damage is unknown. A mishap review will be conducted to determine the source of the damage.

5.5. Aircraft Non-Mishap Reportable Events. Events which do not result in damage or injury can still reveal hazards. It is important these non-mishap events are reported to assist in identifying trends of certain hazards and risks associated with aircraft operations. These events are not considered mishaps and the reporting of these events does not require the automatic suspension of flying privileges outlined in CAPR 70-1, paragraph 8.2.

5.5.1. To aid in determining aircraft maintenance trends, the following types of mechanical failures and malfunctions of aircraft systems will be reported in SIRS:

5.5.1.1. Malfunctions or failures which result in an aborted take-off and/or a flight cancellation after the aircrew has completed the Before Takeoff check.

5.5.1.2. Airborne malfunctions or systems failures which result in mission degradation (inability to safely perform the mission as briefed), an aborted or shortened mission, an unplanned divert to a field other than the intended destination, declaration of an in-flight emergency, or priority handling from air traffic control.

5.5.1.3. All failures or malfunctions of flight controls, including trim and/or auto-pilot malfunctions.

5.5.1.4. In-flight failure of any part of the electrical system of the aircraft that cannot be resolved in flight (e.g., alternator, battery, popped circuit breaker that won't reset, etc.).

5.5.1.5. When in doubt, to allow tracking of possible trends, aircrews are encouraged to report any aircraft anomaly that negatively affects the mission or requires a "work-around."

5.5.2. Any medical issues which occur in flight, which incapacitate an aircrew member or degrade the performance of an aircrew member, will be reported in SIRS. Normal airsickness episodes which do not result in early termination of the mission are not included.

5.5.3. Any near-midair will be reported in SIRS to allow for tracking and review of the circumstances. Near-midair is defined as anytime in-flight separation between two aircraft, or an aircraft and drone, is less than 500' or the pilot deems it necessary to take evasive action to avoid a collision or hazardous situation. For further guidance on FAA reporting of a near-midair, refer to [FAA Aeronautical Information Manual, section 7-6-3](#).

5.6. Aircraft Accident Reporting. The term "accident" has specific meaning in aviation, as defined in [49 CFR 830](#), and should not be used in conversation as a synonym for mishap or incident. There are specific reporting requirements whenever there is an aircraft accident in CAP, including notification of the National Transportation Safety Board (NTSB) as described below. Whenever a wing or region commander suspects an aircraft mishap rises to the level of an accident, it must be reported to the CAP National Operations Center (NOC) immediately, day or night, to allow CAP National Headquarters (NHQ) personnel

to guide and assist with the proper notifications and post-accident requirements (SIRS reporting can follow at a reasonable time in coordination with CAP/SE).

5.6.1. Aircraft Accident Definition. An aircraft accident, as defined in 49 CFR 830, is any aircraft (including glider) mishap which results in death or “Serious Injury” to a person **or** “Substantial Damage” to the aircraft. Detailed definitions of those terms are in [49 CFR 830.2](#). They are summarized here:

5.6.1.1. “Serious Injury” generally includes broken bones, internal injuries, serious burns, or injuries requiring hospitalization.

5.6.1.2. “Substantial Damage” generally includes damage to the aircraft that affects the structural strength of the aircraft or its flight characteristics. That would include internal damage to ribs and spars of the fuselage or wings, or damage to flight controls serious enough to require extensive repair or replacement.

5.6.2. Contact the CAP NOC. Any time an aircraft mishap occurs which may meet the definition of an aircraft accident, it must be reported to the NOC as soon as possible after the event, day or night. A CAP leader (e.g., wing commander, director of operations, wing SE, etc.) will call the NOC toll-free at 888-211-1812, ext. 300 (24 hours/day). The NOC will, in turn, notify CAP and CAP-USAF leadership and appropriate members of the CAP National Staff. The caller should be prepared to offer as much information as possible about the event, but DO NOT DELAY the call if the desired information is not readily available.

5.6.2.1. Include a brief description of what happened, where it happened, and the extent of the damage or injuries if known. Do NOT speculate as to cause of the mishap.

5.6.2.2. Include tail number, mission number, AFAM status, and other mission information if available.

5.6.2.3. Provide the contact information for the wing commander or other designated point of contact for additional information and communication in the period immediately following the event.

5.6.3. Post-Accident Communication, Roles and Responsibilities. To meet all of CAP’s legal reporting requirements, while attending to CAP members, families, the media, and the public, it is important that everyone involved understand their roles and responsibilities. The following will need immediate attention:

5.6.3.1. CAP/SE, or a designated representative, is the CAP Corporation’s designated point of contact for communication with NTSB or FAA investigators. Members should fully cooperate with NTSB and FAA representatives if they are contacted but should refer the NTSB/FAA representatives to CAP/SE as the official CAP point of contact. Record the name and contact information of the FAA or NTSB representative and pass the information via phone call to the NOC, who will pass it to CAP/SE.

5.6.3.2. CAP is the registered owner/operator of CAP aircraft. If a CAP aircraft is involved in an aircraft accident, it is CAP/SE’s responsibility to report the accident to the NTSB in accordance with [49 CFR 830.5](#). Pilots of CAP aircraft should not call the NTSB prior to talking to CAP/SE.

5.6.3.3. CAP/SE will attempt to contact the affected wing or region commander as soon as possible after the accident to establish communication and assist those on the scene. To facilitate that on-going communication, the wing or region commander should appoint a single point of contact as a liaison with CAP/SE. This should be an experienced member who is readily available on scene to communicate with federal/state/local officials as well as regularly communicating with CAP/SE

throughout the days following the mishap. Contact information for the CAP on-scene liaison should be forwarded to CAP/SE as soon as possible.

5.6.3.4. CAP members on scene must not speak to the media on behalf of CAP or speculate as to the nature or cause of the accident. It is proper to say “I don’t know” or “I can’t speculate” when asked questions. Refer all media inquiries to CAP/SE or CAP Marketing and Communications (CAP/MAC, formerly PA) to speak on behalf of CAP.

5.7. Small Unmanned Aerial Systems (sUAS) Mishap Reporting. This section provides guidance for reporting mishaps associated with CAP sUAS missions or training.

5.7.1. Any damage to sUAS equipment which occurs during operation of the equipment, shall be reported as an sUAS mishap. Exception: Simple propeller breaks that are not associated with a crash or other damage do not need to be reported as a mishap.

5.7.2. An injury to any person caused by sUAS equipment, or damage to property that results from sUAS operations (including damage from charging batteries), will also be reported as an sUAS mishap. Exception: If injuries are incurred while using CAP Aerospace Education (AE) STEM kit equipment, report the injury as a Bodily Injury mishap.

5.7.3. sUAS “accidents” as defined in [14 CFR 107.9](#) must be reported to the FAA, in addition to being reported in SIRS, by the sUAS pilot. This includes any operation that results in serious injury or loss of consciousness to any person, or damage to property that exceeds \$500 in value or costs more than \$500 to repair.

5.8. Vehicle Mishap Reporting. A vehicle mishap will be reported any time there is damage to a CAP vehicle (including trailers, utility task vehicles, and temporary use vehicles), whether the vehicle is in operation or damage is discovered on an unattended vehicle, regardless of the cause. A vehicle mishap will also be reported in the following cases:

5.8.1. Any mechanical malfunction or breakage that occurs while a CAP vehicle is in motion, requiring the driver to pull over or otherwise stop driving.

5.8.2. Any time a person is injured as part of a vehicle mishap, the injuries will be reported as part of the vehicle mishap.

5.8.3. Members, when driving privately-owned vehicles, are highly encouraged to report vehicle mishaps that occur enroute to or from a CAP event or activity.

5.9. Bodily Injury Mishap Reporting. All injuries and illnesses that occur as a result of, or during, any CAP event, mission or activity will be reported as a bodily injury mishap. This includes illnesses or injuries that are believed to have pre-existed before the event or activity. Exception: Any injury that occurs as part of an aircraft, vehicle, facility or sUAS mishap (see paragraph 5.6.1.) will be recorded as part of that mishap and not reported separately.

5.10. Facility/Property Mishap Reporting. Any damage to a building, hangar, or other real property that is used as a part of CAP activities, events, or other CAP purposes that is not the result of a vehicle or aircraft mishap will be reported as a facility/property mishap. Examples include damage from fire, severe weather, failure of structure or utilities, etc.

5.11. Additional National Operations Center (NOC) Reporting. In addition to the normal mishap reporting requirements, the following guidance ensures appropriate CAP and CAP-USAF leadership at the

wing, region and national levels are informed when necessary. Note: The guidelines herein do not usurp or change the death reporting guidance in CAPR 35-2, *Notification Procedures in Case of Death, Injury or Serious Illness*.

5.11.1. The NOC may be reached 24 hours/day at 888-211-1812, extension 300.

5.11.2. In addition to the aircraft accident reporting requirements in paragraph 5.5, other serious mishaps should also be reported to the NOC in a timely manner. Wing and/or region leaders should call the NOC whenever they feel National leadership should be informed based on the perceived degree of damage/injury, the possibility of widespread visibility or media attention, or any other extenuating circumstances they feel should be brought to the National Command Team's attention. It is often hard to determine the degree of damage or injury immediately following a mishap. The following are general guidelines, but leaders should not hesitate to call the NOC when they feel it is appropriate. Additional items which should be reported to the NOC include, but are not limited to:

5.11.2.1. Safety Stand-downs. Report anytime a wing or region commander decides to suspend operations of a type of CAP mission, or suspend the operations of CAP aircraft or vehicles, based on mishaps or any safety concerns.

5.11.2.2. Report anytime a powered aircraft is required to make an off-airport landing due to mechanical or other issues (weather, fuel planning, etc.).

5.11.2.3. Report anytime a powered aircraft unintentionally departs the prepared surface of a runway or taxiway. Report anytime a glider unintentionally departs the prepared surface of a runway or taxiway, resulting in damage to the aircraft or airport property.

5.11.2.4. Report any aircraft engine stoppage that occurs while airborne.

5.11.2.5. Report anytime a CAP aircraft is the subject of an FAA-reported near mid-air.

5.11.2.6. Report anytime there is a media inquiry regarding a mishap or other safety-related CAP event or occurrence, or if the event might reasonably be expected to bring negative media (including social media) attention to CAP.

5.11.2.7. Report anytime there is an inquiry from a General Officer or equivalent civilian of any military or other uniformed service, including the National Guard, Coast Guard and Public Health Service, related to any CAP mishap or safety concern.

5.11.2.8. Report anytime there is a safety-related inquiry from a Federal, state or local government official regarding a specific CAP activity or occurrence. Routine contact from a local FAA Flight Standards District Office is excluded from this requirement.

5.11.2.9. Report any information the wing or region commander wants to bring to the immediate attention of the CAP and CAP-USAF Command teams.

5.12. Hazard Reporting, and Safety Suggestions. The first step of the RM process is to identify hazards that result in risks. However, not every hazard is identified through a formal risk assessment, and not every process improvement needs to come as the result of a mishap. Hazard reporting and safety suggestions are a proactive way of reducing risk. Every member is encouraged to be alert to their surroundings to identify hazards or situations which pose a risk of mishap if not addressed.

5.12.1. Notify. Anytime a member notices a hazard or hazardous situation, they should expeditiously report it to their commander or SE for action. In some cases, it may require immediate action such as a “knock it off” call or suspension of the activity.

5.12.2. Report. In the SIRS portion of eServices, the member should select the link titled “Make a Suggestion / Report a Hazard.” Select the appropriate unit, and the option to report a new hazard, or the option to make a safety suggestion. Enter all applicable information on the hazard or suggestion. The report may be anonymous, but members are encouraged to give their names to receive recognition for reporting the hazard as well as assisting in remedying the situation.

5.12.3. Follow-up. The SE of the unit involved in the hazard report or suggestion will ensure timely action is taken to eliminate or control the risk associated with the hazard/suggestion and will enter a journal note in SIRS noting what action was taken. Hazard reports and suggestions should be briefed to members regularly, highlighting the RM steps used to control the risk associated with the hazard. Wing SEs should routinely review (at least annually) the open and closed hazard reports and suggestions with the wing commander to ensure appropriate action has been taken, trends have been noted, and hazard information shared via the Annual Program Review if appropriate (see CAPR 160-1, paragraph 4.8.).

6. Mishap Reviews. Once a mishap has been reported, the next step is to determine why that mishap occurred. By analyzing why it occurred, we can take action to improve our risk controls or correct the factors that contributed to the mishap. Those contributing factors may be previously undetected hazards, or inadequately controlled risks, that should be addressed with corrective actions. The sequence, which begins with the mishap and continues through the implementation and monitoring of corrective actions, is the mishap review process. A solid mishap review process is a key step in the continuous improvement emphasized in Safety Assurance, the fourth pillar of the CAP Safety Management System.

6.1. Key Principles. The following are the three key principles that guide the CAP mishap review process.

6.1.1. We look for the cause; we don’t find fault. Safety mishap reviews are conducted solely to determine what went wrong and what can be improved to prevent it from going wrong again. If, during the mishap review, it appears that there may have been some level of culpability or malfeasance on the part of one or more members, that information will be referred to the chain of command and will not be addressed as part of the mishap review process.

6.1.2. Every mishap review is important. The amount of energy expended in discovering the causes of mishaps has nothing to do with the amount of damage they cause. A minor injury may reveal the same hazards as a serious injury; our efforts are focused on finding those hazards no matter how they are revealed. It is accepted that some mishaps are more complex than others and require more time and resources to review; however, the commitment to find answers must be the same regardless of the mishap.

6.1.3. Value the member. In some cases, a mishap may be caused by an error or act of a member. We do not blame the member. Our goal is to analyze the sequence of events leading up to the mishap and determine what improvements can be made to protect a member from finding themselves in that situation, or to better prepare them to respond should the situation occur again.

6.2. Assigning the Mishap Review Officer. Commanders at every level are responsible for ensuring all mishaps are reviewed at the appropriate level (refer to paragraphs 6.3. through 6.7. for specific review requirements for different types of mishaps). Review officers are assigned as outlined here:

6.2.1. Region Commanders assign review officers for mishaps occurring at region events, or for any mishaps involving aircraft, vehicles, or facilities in the custody of the region. Authority to assign the review officer may be delegated to the region SE or another region staff member.

6.2.2. Wing Commanders assign review officers for mishaps occurring at wing events (or at units within their wing), or for any mishaps involving aircraft, vehicles, or facilities in the custody of the wing. Authority to assign the review officer may be delegated to the wing SE or another wing staff member.

6.2.3. The group commander, squadron commander, activity director, IC, or other member overseeing a CAP activity will ensure their assigned SEs assist in the gathering of data and information to assist in the mishap review process (see subsequent section on conducting the mishap review).

6.2.4. SEs at the region, wing, group and squadron level should be involved in overseeing and assisting in the review of mishaps within their span of control, while keeping their commanders advised of the mishap review status.

6.2.5. Review Officer assignment. Commanders should appoint the most qualified senior member available to review the mishap, based on a balance of mishap review experience and experience in the mission or activity involved. This includes CAP officers and NCOs. When possible, a member who currently holds a position as SE or assistant SE should be selected as the review officer, with the understanding that other members may assist in the review.

6.2.5.1. Review officers are highly encouraged to complete the eServices education module on mishap reviews and use the guidance and tools found on the safety pages of gocivilairpatrol.com.

6.2.5.2. Review officers may be appointed from the unit where the mishap occurred, but commanders should strongly consider appointing a review officer from another unit to offer a fresh look at local procedures, practices and circumstances surrounding the mishap.

6.2.5.3. The review officer for an aircraft mishap will be an aircrew member. If the mishap involves in-flight operation of the aircraft, it is advisable for the review officer to be a pilot qualified in that type of aircraft.

6.2.5.4. While conducting the review of a mishap, the mishap review officer is working for the commander making the assignment and the completion of the review should be considered a primary duty until complete.

6.3. Reviews of Mishaps Involving Death. When a death is involved in any mishap, there will be no formal or informal mishap review conducted by CAP unless jointly authorized by CAP/SE and NHQ General Counsel. Notifications should be made in accordance with CAPR 35-2.

6.4. Review of Aircraft Accidents. Following a CAP aircraft accident which is investigated by the NTSB or the FAA (or any other government agency acting within their jurisdiction) there will be no formal or informal mishap review initiated or conducted by any CAP member unless authorized by CAP/SE following coordination with NHQ General Counsel and the investigating agency (NTSB or FAA).

6.4.1. Immediately following an aircraft accident, CAP members on scene are expected to cooperate with NTSB and FAA representatives to help secure the site and preserve evidence at the agency's direction. Members will not take any further action unless directed by CAP/SE through the local point of contact.

6.4.2. CAP's internal mishap review will be led by CAP/SE. Assisting CAP/SE will be a CAP member review officer, appointed by the region/wing commander. This member review officer will be the local point of contact for the review effort, working under the guidance of CAP/SE while the NTSB investigation is still on-going. CAP/SE will keep the chain of command informed to the maximum extent possible during the review and will closely coordinate on all corrective actions that may be considered following the NTSB/FAA investigation and the CAP mishap review.

6.5. Review of Other Significant Mishaps. Occasionally a mishap will occur that has national implications or may be indicative of a national-level trend. In this case CAP/SE will coordinate with the wing/region commander to guide the review process in a manner similar to an aircraft accident, assisting local members and ensuring members receive the assistance and resources needed to adequately review the mishap.

6.6. Review of Aircraft, Vehicle and Facility Mishaps. Aircraft, vehicle and facility mishaps represent a situation that jeopardizes the mission status of CAP resources, while placing our members at greater risk for injury. As such, a mishap review officer will be assigned for every aircraft, vehicle and facility mishap (in the case of an aircraft accident, refer to paragraph 6.4.).

6.7. Review of Bodily Injury Mishaps. Bodily injury mishaps can range from very minor to severe, with circumstances ranging from a simple error to a complex scenario. It is important that all bodily injuries are scrutinized to ensure all appropriate measures can be taken to prevent injuries to members.

6.7.1. Wing commanders are encouraged to assign a review officer to each bodily injury mishap. This assignment action can be delegated to the wing SE. In most cases, the mishap review should be entered normally in SIRS, and scrutinized at the wing and region command levels for recommendations and CAs prior to being forwarded to NHQ for quality control and mishap closure.

6.7.2. In some cases, the injury is very minor AND appears to be caused by a single human error or an easy-to-explain scenario. In those cases, the wing SE (region SE for region-level mishaps) is authorized to use the "First Aid" option in SIRS rather than appointing a review officer. This may be done only when the information entered in SIRS is enough to determine why the mishap occurred and adequately lists the factors which contributed to the mishap. When mishaps are labeled as "First Aid" by the wing SE, they bypass the normal chain of command and are scrutinized by CAP/SE for sufficiency prior to closure. CAP/SE will either close the mishap or send it to the appropriate commander (wing or region) for further review, providing guidance on what additional information might be needed. At any time during this First Aid process, the wing or region commander may intervene and assign a review officer or direct further review.

6.8. Conducting the Mishap Review. The mishap review is a logical step-by-step process. The first step is to define what happened, then to determine how it happened. Ultimately, an analysis of all the information collected will determine why it happened. By determining why a mishap occurred, and what factors contributed to the mishap, we can develop corrective actions to address those contributing factors. The following paragraphs represent the main steps that every mishap review should include.

6.8.1. Defining the Mishap. This short summary states what happened and is typically the first account entered into SIRS following the mishap. This summary will be sent by eServices to CAP and CAP-USAF leadership as an initial notification, so the following guidelines should be followed, realizing there is an opportunity to enter supporting details in other windows in SIRS where it will be available for those with a need to know.

6.8.1.1. Limit the summary to one or two short sentences, avoiding opinions or conclusions about the extent of the mishap or the cause.

6.8.1.2. Avoid member names and member numbers or any other identifying PII (see CAPR 1-2(l)).

6.8.2. Data Collection. The SE, mishap review officer, or other members on the scene of the mishap should begin the process of gathering all available information dealing with the events leading up to the mishap. It is important to remember that the emphasis is on what led up to the mishap and not on what happened after the mishap. There are numerous important sources for data pertaining to the mishap, including the following:

6.8.2.1. Interviews. It is helpful to interview each member involved in the mishap. The identity of each member involved in the mishap should be entered in SIRS, so the member may enter a statement in case an interview is not possible. Interviews and statements should be completed as soon as possible after the mishap while memories are fresh and should be in non-technical terms, relating all the details that led up to the mishap. It is appropriate to ask members what they were thinking before and during the mishap and what actions they took and decisions they may have made during the time leading up to the mishap.

6.8.2.2. Documentation. In addition to witness statements, there is other documentation that can be helpful in the review process. Once obtained, all applicable documentation will be uploaded into SIRS.

6.8.2.2.1. RM Planning. Determine what risk assessments and safety briefings were conducted prior to the event, including what hazards were addressed and what risk controls were briefed. Obtain a copy of the CAPF 160, *Deliberate Risk Assessment Worksheet*, if one was used.

6.8.2.2.2. If it is an aircraft mishap, obtain a copy of the Preflight Risk Assessment and the Flight Release Officer Checklist from WMIRS.

6.8.2.2.3. Obtain vehicle or aircraft maintenance records if applicable.

6.8.2.2.4. If weather appears to have been a factor, gather historical weather data from online sources.

6.8.2.2.5. Take photographs from far away, up close, and from various angles, to give an overall perspective of the mishap site, as well as the actual damage.

6.8.3. Mishap Analysis. The following are the primary steps in mishap analysis which should be completed in every mishap:

6.8.3.1. Determine the causal factor(s). A causal factor is usually the last event or action that resulted in the mishap. It may be a material failure (something broke), or an action (or failure to act) by a person. It is possible to have more than one causal factor; if not for one or two specific events the mishap would not have occurred. Note that environmental factors (i.e., weather, terrain, darkness) will never be the sole causal factor in a mishap. The primary causal factor in weather related mishaps is usually a failure to adequately assess, avoid or otherwise control the risks presented by the weather phenomenon.

6.8.3.2. Determine the contributing factors. The contributing factors are those factors or pre-conditions that were in place when the mishap causal factor(s) occurred. Every mishap review begins

with the knowledge that efforts have been taken within CAP to control risks and prevent mishaps. Review officers will determine the contributing factors by finding out which risk controls might have failed, and why they failed.

6.8.3.2.1. The Five M's. CAP has layers of risk controls and guidance designed to reduce risk. It is important to look at all the factors that may have influenced each mishap. To accomplish this, CAP uses Five M's to guide the mishap review process. For each mishap, the review officer should look at Management, Mission, Machine, Medium, and Member to determine if there were any preconditions that may have influenced the mishap and could be improved through corrective actions. (For more information on using the Five M's refer to CAPP 163, *Safety Assurance and Continuous Improvement*).

6.8.3.2.2. Five Why's. Once you have used the Five M's to determine which risk controls may have failed, it is important to determine why they failed. The goal is to determine something specific that you can improve upon. Continue to ask why something happened until you find the specific contributing factors that you (or the organization) have the ability and resources to correct. Follow that process for each of the vulnerabilities you found as you reviewed the Five M's (for more information on using Five Why's refer to CAPP 163).

6.8.3.3. Non-Factors Worthy of Discussion (NFWOD). During a mishap review, the review officer may discover hazards or factors that did not cause or contribute to the mishap but should be fixed due to their potential to be a factor in a future mishap (e.g., incorrect wording in a checklist, situations not addressed in guidance, etc.). NFWODs should be documented so they may be addressed through a risk assessment process.

6.8.4. Recommended Corrective Action. Following a thorough examination of the mishap and determination of the contributing factors, the mishap review officer is encouraged to make suggestions on improvements that could prevent mishap recurrence. For each contributing factor, the review officer may make a recommendation specifically addressed at correcting that contributing factor. Recommended corrective actions should be included in the mishap review.

IMPORTANT NOTE: The mishap review is not a formal investigation. The review is accomplished by volunteer members to the best of their ability and is intended solely for the internal use of the Civil Air Patrol for process improvement and mishap prevention. Any opinions or summaries offered by the review officer(s) are for those purposes only and are not intended to be factual evidence in any civil or criminal proceeding, potential CAP disciplinary action, or in the determination of liability.

6.9. The Mishap Review Report ("The Review"). The review is the document which summarizes all the efforts of the mishap review officer, including a summary of the events leading up to the mishap, a listing of those factors that may have caused or contributed to that mishap, as well as recommendations for possible corrective actions.

6.9.1. Writing the review. For ease of writing and to ensure a standard format for CAP mishap reviews, it is important that the review officer use the review template available on the Safety pages of gocivilairpatrol.com. It is available as a fillable Microsoft Word document. The following sections are included in the review.

6.9.1.1. Define the mishap. This is primarily the same information that was originally entered in SIRS when the mishap first occurred. It may be expanded or clarified based on additional information found during the review process. It is a short factual summary to give the reader a brief overview of the mishap.

6.9.1.2. Summarize the data that was collected. This is the information that was collected by looking at each of the Five M's. Listing the Five M's and the information encountered in each area is an effective way of organizing this section.

6.9.1.3. Mishap summary. This is the section where the review officer will summarize the sequence of events that resulted in the mishap, as well as any significant information discovered during the data collection phase. The summary should be written as a chronological sequence of events beginning with noteworthy aspects of the planning and preparation, continuing through the mishap event itself, with increasing detail as the chain of events get closer to the actual mishap.

6.9.1.4. Causal Factors. List the distinct causes. See paragraph 6.8.3.1.

6.9.1.5. Contributing Factors. These are the specific factors, or pre-conditions, that led up to the mishap. These are the areas where improvements could be made to help prevent similar mishaps in the future.

6.9.1.6. NFWODs. If the review officer found issues or factors that didn't affect this mishap, but have the potential to cause other problems, they should be recorded in this section.

6.9.1.7. Recommendations. Being familiar with the circumstances of the mishap, the review officer should make recommendations that would correct or reduce the risk associated with the contributing factors. Wing and region commanders should consider these recommendations as they determine the corrective actions that will be taken.

6.9.2. Completing the review process. Once the review officer has completed the mishap review report, it should be saved as a Microsoft Word document. The document should be clearly labeled with the SIRS Mishap ID number and uploaded as an attachment in that mishap's page in SIRS. The mishap review document is preferred, but for relatively minor mishaps it is acceptable to type the review, including cause and contributing factors, directly into the input window provided in SIRS.

6.10. Chain of Command Actions and Mishap Closure. Once the mishap review has been completed and the review uploaded into SIRS, the wing commander and region commander will have opportunities to review, comment, and assign corrective actions. Wing and region commanders are highly encouraged to use their SE to review all mishap information and make recommendations on whether the report needs further attention or if it sufficiently summarizes the event and the contributing factors. Based on their training and experience, the SE may also make further recommendations as to possible corrective actions.

6.10.1. Based on the review and the recommendations of their staff, the wing commander (region commander for region mishaps) will assign corrective actions to specific members. These corrective actions should be specifically targeted towards contributing factors identified in the review. For further guidance on developing suitable corrective actions, refer to CAPP 163.

6.10.2. After assigning corrective actions and inserting comments (if desired) in SIRS, the wing commander will submit the mishap to the region commander. Subsequently, the wing commander will ensure corrective actions are completed as prescribed and will notify the region SE or CAP/SE of any corrective actions with region or national implications.

6.10.3. The region commander will review the mishap package and will either comment and submit the mishap to CAP/SE for closure or return the review to the wing for further action or information.

6.10.4. After the mishap review is submitted to CAP/SE by the region commander, CAP/SE staff will peruse the mishap review and accompanying information to determine if the review adequately identifies and addresses the contributing factors, and the corrective actions directed by the wing commander adequately address the contributing factors. CAP/SE will either make summary comments and close the mishap or will send the review back through command channels with specific requests for additional information. Following mishap closure, CAP/SE will monitor corrective actions to ensure timely completion.

6.10.5. In all cases wings and regions will make every effort to keep the mishap review process moving so revealed risks may be addressed in a timely manner. All mishap reviews should arrive at NHQ within 60 days of the mishap.

6.11. Protection of Sensitive Mishap Information. Information used in the review of mishaps is sensitive in nature and must be protected. The following guidelines apply:

6.11.1. Secure Digital (SD) Card Information. The SD card which is carried in the upper slot of the multifunction display (MFD) in CAP G1000-equipped aircraft is capable of recording data that can be useful in the mishap review process. Aircrews must verify the SD card is in place and functioning prior to flight, or it will be written up as an aircraft discrepancy in WMIRS. Only a maintenance officer, or person designated by the maintenance officer, may remove the card to perform database updates or to facilitate maintenance, and the card will then be reinstalled. **The data from the card will NOT be downloaded without the express permission of CAP/SE in support of safety programs.**

6.11.2. Safety Information and Reporting System (SIRS). All information entered or uploaded into SIRS is for the sole purpose of reviewing CAP mishaps to determine what can be done to prevent future CAP mishaps.

6.11.2.1. Access to SIRS will be restricted to CAP members and staff members with a verified need to access SIRS to perform their assigned safety duties. Other than case-by-case approvals by CAP/SE, access will be based on specific duty titles entered in eServices. Commanders are responsible for ensuring all members with access to SIRS have the requisite qualifications and training outlined in CAPR 160-1.

6.11.2.2. Information in SIRS will only be used for the review and tracking of CAP mishaps. Any usage of SIRS-stored information that is not specifically related to mishap review and prevention is expressly prohibited and should be reported to CAP/SE if it occurs.

6.11.2.3. All information downloaded from SIRS is subject to PII protection standards outlined in CAPR 1-2(I).

MARK E. SMITH
Major General, CAP
Commander

Attachment 1
Compliance Elements

Checklist and Tab	#	Compliance Question	How to Verify Compliance	Discrepancy Write-up	How to Clear Discrepancy
CI E-2	01	Was the Wing SE knowledgeable in the use of the Hazard Reporting / Safety Suggestion portion of SIRS?	SE will show open and closed suggestions / hazards for their unit/wing. If none in the system, SE will demonstrate usage of the module.	Wing SE was not knowledgeable in the use of the SIRS Hazard Reporting / Safety Suggestion module, in accordance with CAPR 160-2, para 5.11.	Verify knowledge of the system by entering, resolving and closing a safety suggestion or hazard report.
SUI E-2	01	Was the Unit SE knowledgeable in the use of the Hazard Reporting / Safety Suggestion portion of SIRS?	SE will show open and closed suggestions / hazards for their unit/wing. If none in the system, SE will demonstrate usage of the module.	Unit SE was not knowledgeable in the use of the SIRS Hazard Reporting / Safety Suggestion module, in accordance with CAPR 160-2, para 5.11.	Verify knowledge of the system by entering, resolving and closing a safety suggestion or hazard report.