

U.S. Department
of Transportation

United States
Coast Guard



Commandant
United States Coast Guard

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COMDTNOTE 5100

27 JUN 2001

COMMANDANT NOTICE 5100

CANCELLED:

Subj: CH-5 TO SAFETY AND ENVIRONMENTAL HEALTH MANUAL, COMDTINST M5100.47

1. **PURPOSE.** This Notice publishes revisions to the Safety and Environmental Health Manual, COMDTINST M5100.47. Intended users of this directive are all units which maintain the manual.
2. **ACTION.** Area and district commanders, commanders of maintenance and logistics commands, commanding officers of headquarters units, and assistant commandants for directorates and special staff offices at Headquarters shall ensure compliance with the provisions of this Notice.
3. **SUMMARY OF CHANGES.** This document is substantially revised and must be completely reviewed. The following list is a summary of major change areas:
 - a. The Safety and Environmental Health Manual, COMDTINST M5100.47 Chapter 3 "Mishap Response, Investigation, and Reporting" consolidates instructions for Aviation, Shore, and Vessel mishaps from the previous Chapters: 2 "Aviation Safety Program," 3 "Shore Facility Mishap Reporting," 8 "Vessel Safety Program." All other portions of existing Chapters 2 and 8 remain in effect.
 - b. A Mishap Response Flow Chart (Figure 3-1) has been added to summarize the process and reference applicable sections for all types and classes of mishaps.
 - c. The Personal Casualty Report process has been referenced in Chapter 3 as certain mishap events require both it and the Mishap Report process to be applied.
 - d. Additional clarifications/requirements/changes have been made in:
 - (1) Definition of Mishap Events
 - (2) Mishap Classifications
 - (3) Mishap Type (Operational Mode)

DISTRIBUTION -- SDL No. 139

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NON-STANDARD DISTRIBUTION:

27 JUN 2001

- (4) Mishap Verbal Notification Requirements
- (5) Mishap Reporting Deadlines and Distribution
- (6) Mishap Analysis and Investigation Process
- (7) Message Formats and Distribution
- (8) Mishap Report Message (MISREP)
- (9) Mishap Analysis Board (MAB)
- (10) Mishap Analysis Report (MAR) Format and Distribution
- (11) Commandant's Safety Board

e. Mishap Messages are to include the statement:

//////////////////////////////////////
 WHAT FOLLOWS MAY CONTAIN PRIVILEGED SAFETY INFORMATION.
 USE FOR MISHAP PREVENTION PURPOSES ONLY.
 //////////////////////////////////////

- f. Aviation Mishap Messages are now info'd to MLCLANT (kse) and MLCPAC (kse) if an injury is involved.
- g. Vessel Non-Operational and Shore Mishap Messages now use the same format. MLCLANT (kse), MLCPAC (kse), and Commandant (G-OCS) are included in the distribution.
- h. Changes to MAR legal notices for documentation and mailing.
- i. The dollar amount defining a Class C Mishap has been raised from \$10,000 to \$20,000 for consistency with Department of Defense (DoD) mishap classification.
- j. The work-hour cost in property repair has been raised from \$16 per hour to \$18 per hour for consistency with DoD mishap cost classifications.

4. **PROCEDURES.** No paper distribution will be made of changes to this Manual. Official distribution will be made via Coast Guard Directives System CD-ROM and the Department of Transportation website at: <http://isddc.dot.gov/>. An updated electronic version of the entire Manual and noted changes for downloading is available via the Commandant (G-WK) Publications and Directives website at: <http://www.uscg.mil/hq/G-W/g-wk/g-wkh/g-wkh-1/Pubs/Pubs.Direct.htm>. Message notification will announce changes and effective dates.

a. Remove and insert the following pages:


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Remove:

Table of Contents p. i thru v
Chapter 2, p. 2-9 thru 2-38
Chapter 3
Chapter 8, p. 8-9 thru 8-34
Enclosure (2)
Enclosure (4)
Enclosure (5)
Enclosure (6)
Enclosure (9)
Enclosure (10)
Enclosure (13)
Enclosure (14)
Index

Insert:

Table of Contents p. i thru iv, CH-5
Chapter 2, p. 2-9 thru 2-10, CH-5
Chapter 3, CH-5
Chapter 8, p. 8-9, CH-5
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Enclosure (4), CH-5
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JOYCE M. JOHNSON
Director of Health and Safety

Encl: (1) CH-5 to Safety and Environmental Health Manual, COMDTINST M5100.47

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- (1) Employee Hazard Reporting, Hazard Identification and Abatement
- (2) Mishap Analysis Report Format
- (3) Medical Officers' Report
- (4) Mishap Board Procedures
- (5) Format for Coast Guard Aviation Mishap Message
- (6) Format for Vessel Underway Operational Mishaps
- (7) Sound Level Survey Report Instructions (RCN-5100-3)
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- (9) Format for Vessel Non-Operational and Shore Mishap Message
- (10) Limitations of the Use and Disclosure of Mishap Investigations and Reports
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- (14) Optional Format for MAB Progress Message
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- (16) Sample Mishap Analysis Kit
- (17) Sample MOU Between USCG and Local Fire Department

2-F-3. f. (cont'd) officer of the host vessel, or the operational commander in control over the deployment, on matters concerning aviation safety.

G. **Selection of Aviation Safety Officers.** Selection of aviation safety officer trainees will be made by Commandant (G-WKS-1) based on the recommendation of the unit commanding officer and the needs of the service. Normally, a prospective Aviation Safety Officer will not be trained until designated as an aircraft commander and selected for an aviation safety officer position. An aviation officer who entered the Coast Guard from another service and has held a flight safety designation in that service may, upon being qualified as an aircraft commander, apply for designation. The unit commanding officer's endorsement shall be based on an evaluation of the applicant's performance, ability as an aviator, rapport with fellow officers and enlisted personnel, and career motivation.

H. **Pre-Mishap and Salvage Plans.** Each aviation unit, deployment unit, and vessel operating aviation resources shall have a Pre-Mishap and Salvage Plan. These plans shall be updated as necessary to ensure that essential personnel are knowledgeable concerning their duties. The plan shall provide checklists to guide the actions of personnel initially responding to the mishap and provide for all reasonable contingencies. For further guidance on pre-mishap planning and mishap investigation, see Chapter 3 of this manual.

1. **Analysis Kit.** Units shall maintain a kit that contains the basic equipment required for conducting an analysis. Suggested contents for such a kit is contained in the Handbook for Aircraft Accident Investigators. This kit should be kept in a readily accessible location and should normally be maintained by the Aviation Safety Officer.
2. **Photographic Services.** Immediate and adequate photographic coverage of a mishap might prove to be the best source of information in finding the causal factors. This is particularly true if the mishap involves considerable initial salvage. Most units do not have a photographer assigned; therefore, prior arrangements must be made for photographic coverage. Since the time element might be a critical factor, the notification of a photographer should be included as one of the first steps in the Pre-Mishap Plan.
3. **Flight Surgeon/Medical Officer Activities.** The need for an immediate human factors investigation by a medical officer following a mishap is well established. The Uniformed Services have agreed that the first medical officer on a mishap scene, or the one to whom mishap victims are brought, shall perform examinations and laboratory procedures required by the medical officer's service. However, it is the responsibility of the victim's parent service to delineate unique requirements or to assume this aspect of the investigation as soon as possible.

2-H-4. **Salvage Officer**. The Salvage Officer designated in the Pre-Mishap Plan is responsible for preparing and maintaining a Salvage Plan as described in the Coast Guard Air Operations Manual, COMDTINST M3710.1 (series).

CHAPTER 3 MISHAP RESPONSE, INVESTIGATION AND REPORTING

- A. Scope. This chapter provides requirements and guidance for response, investigation and reporting of Coast Guard mishaps.
- B. Mishap Definition. Any unplanned, unexpected or undesirable event causing injury, occupational illness, death, or property damage/loss. The term mishap will be used in lieu of accident or occupational illness.
- C. Policy. All Coast Guard mishaps will be investigated and reported in accordance with the requirements of this chapter.
- D. Mishap Response Flow Chart. Use the Figure 3-1 flowchart located on page 3-2 of this manual, together with the appropriate sections of this chapter to determine:
 - 1. Whether a reportable mishap has occurred.
 - 2. The appropriate unit response, investigation and reporting responsibilities.
- E. Pre-Mishap Plan. Each unit shall develop a pre-mishap plan to organize an effective unit response to Class A and Class B Mishaps (see section 3H to this manual for a definition of Class A and B mishaps). The plan need not be a separate unit instruction, but may be reflected in Standing Orders, Standard Operating Procedures, and/or Operational Bills. Because of the limited resources and response capabilities of smaller units, Group Commanders shall establish pre-mishap plans, which cover mishaps for units within the Group. A sample Group pre-mishap plan is provided in enclosure (15) to this manual.
 - 1. Pre-mishap plans are the main tool to help a unit plan ahead to reduce the debilitating effects of a major mishap.
 - 2. To remain a viable tool, pre-mishap plans must be reviewed and exercised at least annually to ensure accuracy and unit familiarity. Phone numbers (include home and work) and names of next of kin, point of contacts, and local procedures shall be verified and updated regularly.
 - 3. A good plan provides simple, easy to use checklists to ensure key personnel are knowledgeable concerning their duties following a mishap. Permanent Unit Mishap Analysis Board members, and their alternates, must be clearly identified in the pre-mishap plan. Their respective duties must be delineated prior to the mishap. Members should be identified by position or billet and not by name.
 - 4. Pre-mishap plans distribute tasks and resources for:
 - a. Notification of the chain of command.
 - b. Rescue and emergency medical care of personnel.
 - c. Minimizing injury and property damage, including secondary or follow-on mishaps.

Mishap Response Flow Chart

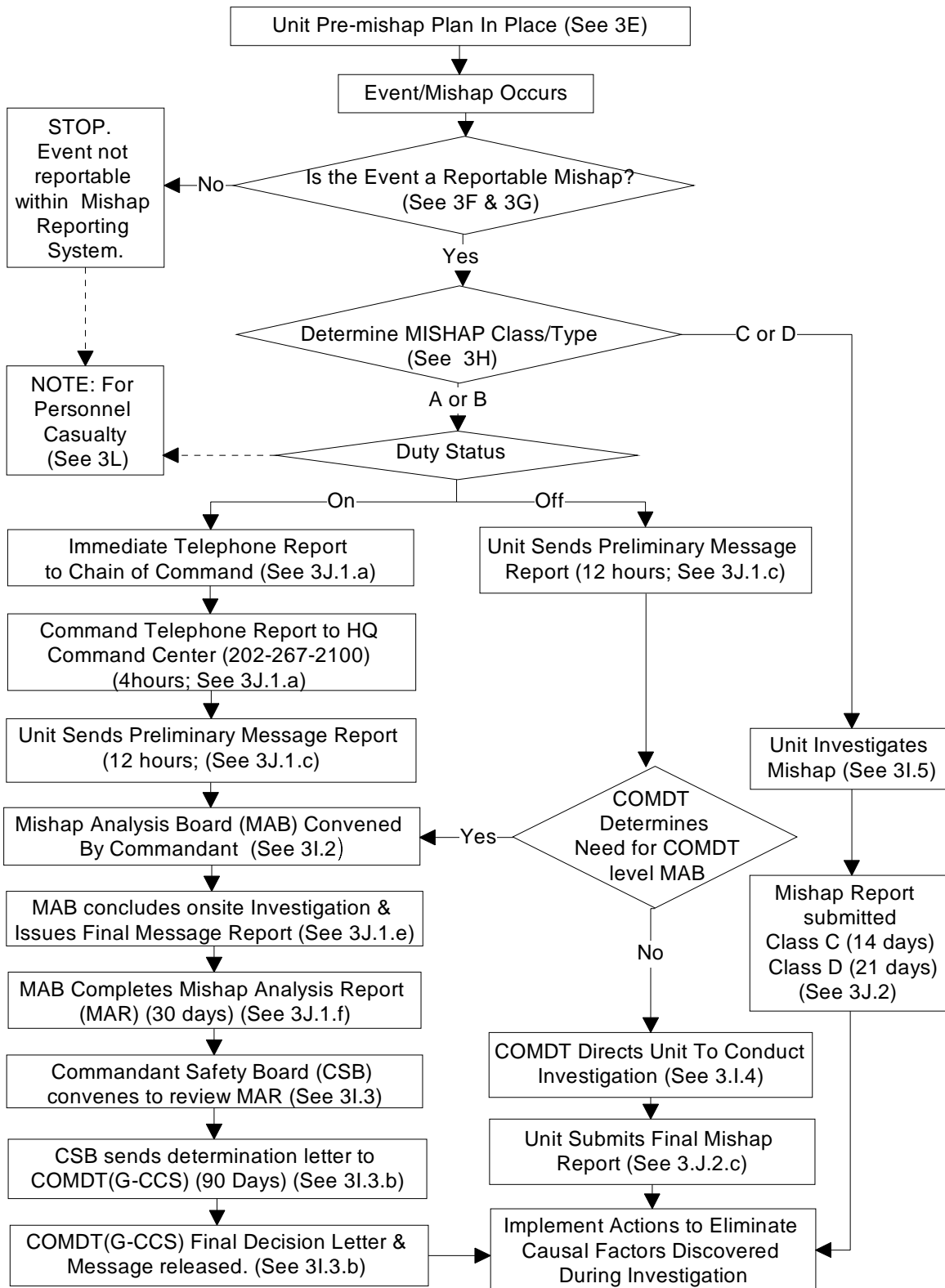


Figure 3 - 1

- d. Notification of next-of-kin (NOK), death-imminent process, media, etc.
 - e. Security of mishap site.
 - f. Preservation of wreckage to facilitate analysis of the mishap causes and eventual restoration of damaged property; e.g., photograph, fluid samples oil, fuel, etc., physical examinations as appropriate, etc.
 - g. Prior arrangements and coordination with other military, government and civilian agencies to obtain the necessary fire-fighting, rescue and salvage equipment, security guards, divers, flight surgeons, medical facilities, logistics, photographers, etc.
 - h. Preliminary mishap investigation and analysis which includes activating the unit mishap board, interviewing witnesses and initiating critical physical examinations and fluid specimens. See Section 3-I of this manual.
 - i. Unit Critical Incident Stress Management actions.
 - j. Safeguarding of electronic memory units. Commandant (G-SEA) and (G-WKS) will provide guidance on the correct routing, handling, downloading, and analysis of aircraft electronic memory units. This includes crash survivable memory units in flight data recorders (FDR), cockpit voice recorders (CVR), and nonvolatile memory (NVM) chips on circuit cards from electronic engine controls, programmable navigation equipment, and other avionics. As shipboard automated systems evolve, similar steps may be required of shipboard system memory units.
5. Not every circumstance at every unit can be anticipated. The guidance presented provides a framework which must be tailored and customized by each unit according to their own requirements, equipment, mission responsibilities, etc. Pre-mishap plans should incorporate the eventuality that the unit mishap board may be required at a site away from the home unit.
6. In the past, five areas of pre-mishap planning have proven weak and are highlighted below. These areas should be particularly reviewed and addressed in all pre-mishap plans.
- a. Telephone/Recall Lists. These lists should include names, home numbers and work numbers of spouses or next of kin. Mishaps often occurred during work hours and next of kin could not be located for many hours because work telephone numbers were not known. Verify and update at least annually.
 - b. Incoming Telephone Calls. Commands often experienced such a deluge of calls from other units, friends, media, senior commands, etc., that their ability to make outgoing calls was severely impacted. Controlling this influx will be difficult and needs to be addressed in unit planning. A mechanism needs to be established to screen calls,

eliminating press/interested parties posing as official Coast Guard callers.

- c. Next of Kin (NOK) Notifications. Although not necessarily a safety function, this essential duty needs to be considered in the plan. Commands should anticipate the need to make several notifications simultaneously and in a timely manner. Additionally, there are administrative requirements for death imminent retirements or death notifications that have strict time limits. These need to be reviewed with administrative staff, parent commands and district/area support staff and should be noted in the plan. (See the Personnel Manual, COMDTINST M1000.6A, Chapter 11, Section A.)
- d. Critical Incident Stress Debriefing (CISD). Units suffering serious loss will benefit from CISD. Additionally, members of a unit suffering serious loss may require extended counseling. These capabilities are available through the servicing ISC worklife staff. The telephone number of the ISC worklife employee assistance coordinator should be part of the pre-mishap plan.
- e. Established support plans with other emergency preparedness agencies (e.g., MOU's with local police departments, fire departments, rescue and SWAT teams, other federal agencies, hospitals, etc.). Other agencies that are part of the pre-mishap plan response should be included in the annual exercise at the discretion of the Commanding Officer to ensure effectiveness.

F. Mishap Events. The following events constitute a reportable mishap:

- 1. Injury/Illness.
 - a. Coast Guard active duty military personnel injured, missing, missing in action, or killed, on or off duty.
 - b. Coast Guard civilian personnel injured, missing, missing in action, or killed while performing Coast Guard work, on or off Coast Guard property. Any occupational injury or illness reported on a Form CA-1 or CA-2 to the Office of Workers' Compensation, Department of Labor, is a mishap.
 - c. Coast Guard Reserve personnel injured, missing, missing in action, or killed while on active duty. (Active Duty for Training (ADT), Active Duty for Special Work (ADSW), or Inactive Duty for Training (IDT).)
 - d. Coast Guard Auxiliary personnel injured, missing, missing in action, or killed while under orders. See the Auxiliary Operations Policy Manual, COMDTINST M16798.3 (series).
 - e. Coast Guard contractors injured or killed while working on Coast Guard property or equipment.

- f. Non Coast Guard personnel and visitors injured, missing, or killed on Coast Guard property or as a result of Coast Guard controlled or supervised activities.
 - g. Coast Guard military or civilian personnel who develop an illness which may reasonably be ascribed to an immediate (acute) or long term (chronic) exposure to chemical or physical agents in the workplace. For chronic exposures, a mishap report shall be initiated upon first diagnosis of the illness. An example of an occupational illness is a hearing threshold shift.
 - h. Coast Guard Exchange System (CGES) personnel killed or injured while performing Coast Guard work.
2. Property Damage.
- a. Damage to Coast Guard afloat or ashore facilities or aircraft.
 - b. Damage to non Coast Guard facilities as a result of Coast Guard operations.
 - c. Personal property owned by Auxiliary units or Auxiliarists under orders that is damaged in the course of duty.
3. Other.
- a. Accidental firearms discharge.
 - b. Electrical shocks.
 - c. Fall overboard from vessels or supporting equipment and facilities.
 - d. Vessel Rollovers and Knockdowns (in excess of 90 degrees from an even keel)
 - e. Fires
4. Other Aviation Reportable Events. Report as Class D flight-related mishaps, events that may not meet the criteria of a reportable event (as listed above), but can be used as indicators of possible trends and can teach valuable lessons. These events usually do not have costs associated with them and do not involve injury or illness. These lessons learned incidents make for "hangar flying" or "there I was..." topics and should be shared. They shall be reported to prevent similar events from becoming actual mishaps.
- a. Near Midair Collisions. Near midair collisions are extremely hazardous situations requiring special reporting procedures. Chapter 2 of this manual and the Coast Guard Air Operations Manual, COMDTINST M3710.1 (series) provide specific reporting requirements for these events.
 - b. Human Factor Event. A psychological, physiological, or pathological condition occurring to a crewmember when intent for flight exists and results in interference of a crewmember's duties. This includes flight delays, diverts or aborts due to conditions affecting a crewmember or

passenger (airsick, vertigo, suspected or proven hypoxia, other toxic exposure, decompression events, preexisting illness, spatial disorientation, other in-flight incapacitation or injury).

- c. Special Operations. From time to time, headquarters will request that certain events be reported (e.g., use of the Traffic Collision Avoidance System (TCAS)).
- d. Precautionary or Forced Landing (Aborted Flights). Any landing required because conditions or circumstances make further flight inappropriate or impossible is a reportable event. This includes emergency or precautionary landings when imminent engine and/or rotor system failure is confirmed after landing. Precautionary landings without confirmed failure, malfunction, or damage (e.g. suspected blade strike, warning lights, bird-strike, etc.) and no additional damage occurs during landing are not reportable (no components are replaced). However, if additional circumstances surrounding the event can be of value to the fleet, the event should be reported as a Class D Flight-Related mishap (e.g. positive or negative Crew Resource Management (CRM)). If the event does not result in replacement of the component, it is not reportable.
- e. The following events are reportable aviation mishaps and should be reported under the appropriate mishap Class based on damage costs or injury:
 - (1) Power Loss. Any engine flameout, failure, substantial loss of power or required engine shutdown, regardless of successful restart. Unintentional engine shutdowns are reportable, regardless of restart.

NOTE: Intentional engine shutdowns (training, test flight, etc.) are not reportable, unless the engine fails to restart or other circumstances surrounding the event can be of value to the fleet. Then the event should be reported as a Class D Flight-Related mishap.

- (2) Propeller, Rotor or Engine Wash. Damage or injury resulting from propeller backwash, rotor down wash, or engine exhaust is reportable.
- f. Weather Related Mishaps. Events caused by natural phenomena such as turbulence, lightning, sea state, floods or surges, restricted visibility, or static discharge, etc.
- g. Jettison of a sling load or other external stores (intentional or unintentional) resulting in damage or injury.
- h. Unplanned or inadvertent equipment drops resulting in injury or property damage.
- i. Impact Damage. Damage or injury resulting from striking or being stuck by foreign objects.

- j. Emergency breakaway during replenishment, helicopter-in-flight-refueling (HIFR), refueling at sea.
- k. TFOA (Things Falling Off Aircraft). Damage or injury caused by any object unintentionally dropped or falling from an aircraft shall be reported regardless of amount of damage or severity of injury.
- l. Aborted Takeoffs: An event that occurs before takeoff and interrupts a planned flight (i.e., vibrations, warning lights, noises or fumes, etc.).
- m. Other Occurrences. Any event not specifically listed above where a definite mishap potential or trend exists and the Coast Guard Aviation Safety Program could benefit from the report. These may not have resulted in property damage or injury, but there is benefit from the lessons learned. Examples include: use of emergency procedures, use of nonstandard procedures, excellent displays of CRM, a significant failure of crew coordination, mishandling of Coast Guard equipment, or problems with aviation life support equipment.

NOTE: Reporting events involving positive action by the crew, good CRM or where crew actions avoided a more catastrophic outcome is encouraged. Incidents compounded by a breakdown in CRM or no CRM should also be reported. These events should be reported as Flight-Related Class D mishaps.

- n. Contractor Mishaps. Investigate and report all contractor mishaps resulting in reportable Coast Guard aviation damage.

5. Other Vessel Reportable Events. Report as Class D vessel related mishaps, events that may not meet the criteria of a reportable event (as listed in F1 through F3), but can be used as indicators of possible equipment/training trends and or can teach valuable lessons. These events usually do not have costs associated with them and do not involve injury or illness. They shall be reported to prevent similar events from becoming actual mishaps.

- a. Events which may identify possible deficiencies in current boat operations policy or procedures.
- b. Events which identify possible deficiencies in boat outfit or personal protective equipment.
- c. Events which identify possible deficiencies in platform configuration or performance.

6. Near Misses/High Potential (HIPO) Events. Near mishaps, lessons learned events or other events with a High Potential (HIPO) for injury, damage or Coast Guard wide implications are reportable even though they result in MINIMAL or NO DAMAGE OR PERSONNEL INJURY.

G. Non Reportable Mishap Events. The following events are non-reportable as mishap events and do not fall under the requirements of this manual:

1. Suicide, homicide or other malicious and intentional acts that result in physical harm or property damage.
2. Illnesses which are not the result of an occupational exposure.
3. Intentional damage or injury including damage or injury caused by hostile action, malicious acts of sabotage or arson, law enforcement action ordered by competent authority, intentional damage or destruction for R&D purposes.
4. Conditionally Predicated Damage or Damage Which Cannot Be Reasonably Prevented. Damage from storms, range or forest fires, and floods.
5. Normal Wear and Tear. Do not report damage, malfunctions or failures of equipment or components due to normal wear and tear, if it has a fixed useful life less than the complete system. These items are subject to periodic inspections, maintenance and replacement, and are **NOT** reported as mishaps.

NOTE: This applies only if the malfunction or failure is the **ONLY** damage and the sole corrective action is to replace or repair the component. When a malfunction or failure of one component causes collateral damage to another component, the incident is reportable (e.g., a blown tire that damages a wheel well.)

NOTE: Design defects, poor workmanship, incorrect use of materials and improper installation is not considered normal wear and tear.

6. Coast Guard Flying Club. Mishaps involving CG flying club aircraft are not reportable as an aviation mishap, however, if there is injury or death the event should be reported as an off-duty mishap.
7. Bird Strikes with No Damage. Bird strikes without aircraft damage or personnel injury (even if a precautionary landing is made) are not reportable. If additional circumstances surrounding the event would be of value to the fleet, report the event as a Class D Flight-Related mishap.
8. Planned Controlled Jettison. Intentional jettison or release during flight of cargo, fuel, life rafts, auxiliary fuel tanks, drag chutes or external equipment when there is NO reportable damage to the aircraft or other property or injury. This does not apply if the jettison was the result of a malfunction. A good test of this exception is to question the intent of the aircrew. If the load was not meant to depart the aircraft, it is a reportable mishap. However, the jettison is intentional and other aspects of the event can be of value to the community, report as a Class D Flight-Related mishap.
9. False Indications. False Alarms (precautionary landings, engine, propeller or rotorhead shutdowns) determined to be the result of erroneous indicators (e.g., chip light, warning light, etc.) are not reportable UNLESS it results in repair or replacement of a component.

H. Mishap Classifications. Mishaps are classified according to severity level (class) and operational mode (type).

1. Mishap Class (severity). Mishaps are divided into four classifications according to severity of injury or cost of property damage/loss. Class A and B

mishaps are the most serious or costly and usually warrant a formal Commandant appointed Mishap Analysis Board (MAB).

a. Class A. A mishap in which:

- (1) An injury or occupational illness results in a fatality or permanent total disability.
- (2) The cost of reportable property damage is \$1,000,000 or greater. To determine cost, see enclosure (13) to this manual.
- (3) A Coast Guard aircraft, cutter or small boat is missing, abandoned, recovery is impossible or impractical, or is beyond economical repair.
- (4) A midair collision, regardless of the severity of injury or amount of damage.
- (5) Cases where Coast Guard personnel are missing or missing in action.

b. Class B. A mishap in which:

- (1) Any injury and/or occupational illness resulting in permanent partial disability.
- (2) The resulting cost of reportable property damage, is \$200,000 or more, but less than \$1,000,000. To determine cost, see enclosure (13) to this manual.
- (3) Three or more personnel are inpatient hospitalized.
- (4) For small boats 30 feet in length or greater, damage is \$50,000 or more.
- (5) For small boats less than 30 ft. in length, damage is equal to or greater than half of the replacement cost of the boat.

c. Class C. A mishap in which:

- (1) An injury or occupational illness which results in any loss of time from work beyond the day or shift on which it occurred (lost-time case). This includes individuals placed on limited duty for more than 30 consecutive days.
- (2) Property damage is \$20,000 or more, but less than \$200,000. To determine cost, see enclosure (13) to this manual.
- (3) A person falls overboard accidentally from a vessel or a pier or other structure or equipment associated with Coast Guard operations.
- (4) Any grounding, capsizing, rollover or knockdown greater than 90 degrees from an even keel, that does not meet higher reporting criteria.

d. Class D. A mishap in which:

- (1) An injury or occupational illness occurs requiring more than simple first aid treatment that does not meet the criteria of a Class C mishap (no lost-time case). This includes individuals placed on limited duty for less than 30 consecutive days.
 - (2) The cost of property damage for non aviation mishaps is \$1,000 or more but less than \$20,000. To determine cost, see enclosure (13) to this manual.
 - (3) The cost of property damage for aviation mishaps is less than \$20,000. To determine cost, see enclosure (13) to this manual.
 - (4) An accidental firearm discharge or an electrical shock occurs that does not meet the criteria of a higher classification.
 - (5) A near midair collision (NMAC) occurs. Report as a Flight-Related Class D mishap. See section 3.F.4.a and Chapter 2 of this manual for additional NMAC reporting requirements.
 - (6) Near Misses/High Potential (HIPO) Events. Near mishaps, lessons learned events or other events with a High Potential (HIPO) for injury, damage or Coast Guard wide implications are reportable as Class D mishaps, even though they result in MINIMAL or NO DAMAGE OR PERSONNEL INJURY.
 - (7) Other Aviation Reportable Mishaps. (See section 3.F.4.)
- e. Aviation Class E. Aviation mishaps involving engine damage only, regardless of the damage cost. If the damage is not contained or not limited to the engine (i.e., airframe, props, rotors, non-airframe damage or injury), the mishap will be reported and investigated according to the appropriate mishap Class. (Class E mishaps can be Flight, Flight-Related or Ground.) Class E incidents also include Foreign Object Debris (FOD) Damage Incidents.

NOTE: Foreign Object Debris (FOD) Damage. Foreign Object Debris (FOD) damage confined to the engine or limited to internal components (does not include cowling) are reported as a Class E mishap. If engine parts are not contained, exit the engine and cause other damage, then report as the appropriate mishap Class based on severity of the mishap

NOTE: FOD mishaps where the engine is the only damage do not normally require a formal mishap investigation and are reported as a Class E mishap. Commandant (G-WKS) may deem it necessary to convene a Mishap Analysis Board, if other circumstances dictate.

2. Injury Severity Definitions. For the purposes of mishap reporting (unrelated to Physical Disability Evaluation Processing (PDES)), the following definitions apply:

- a. Permanent Total Disability. Any non-fatal injury or occupational illness that in the opinion of competent medical authority, permanently and totally incapacitates persons to the extent that they cannot follow any gainful occupation.

NOTE: The loss of use of both hands, both feet, both eyes or a combination of any of these body parts as a result of a single mishap, shall be considered as a permanent total disability.

- b. Permanent Partial Disability. An injury or occupational illness that does not result in death or permanent total disability but, in the opinion of competent medical authority, results in permanent impairment through loss or loss of use of any part of the body with the following exceptions:

- (1) Loss of one or more teeth.
- (2) Loss of fingernails or toenails.
- (3) Loss of tips of fingers or tips of toes.
- (4) Inguinal hernia, if it is repaired.
- (5) Disfigurement.
- (6) Sprains or strains that do not cause permanent limitation of motion.

- c. Simple First Aid Treatment. First aid which a person, who may or may not be a health care professional, can provide. It is limited to one-time treatment and subsequent observation of minor scratches, cuts, burns, splinters and so forth which do not normally require medical care.

3. Mishap Type (Operational Mode). Mishaps are divided into mishap types according to the operational mode in which it occurs.

- a. Flight Mishap. Mishaps involving Coast Guard aircraft damage/loss with or without other property damage, personnel death/injury, or occupational illness where intent for flight existed at the time of the mishap.

NOTE: Intent for Flight is used to differentiate among the types of aviation mishaps. Intent for flight exists when an engine is started for the purpose of flight and continues until the aircraft comes to rest with the engine(s), propeller(s), or rotor(s) stopped and brakes set or wheel chocks in place. An aircraft's engines are considered started or running the instant any one of them is set into motion intentionally, either by internal or external power. In the case of an amphibian aircraft (Auxiliary only) landing on water, intent for flight ceases when the aircraft has made a water landing, the engine(s), propeller(s) or rotor(s) have stopped, and the aircraft has been anchored, moored, taken in tow, or otherwise comes to rest (adrift).

- b. Flight-Related Mishap. Mishaps in which there is NO Coast Guard aircraft damage. Intent for flight must have existed at the time of the mishap, and other property damage, death, injury, or occupational illness occurred. (Includes near midair collisions, non-aircraft damage caused by rotor wash, personnel injury and other reportable events with NO reportable Coast Guard aircraft damage.)
- c. Aviation Ground Mishap. Mishaps involving damage to Coast Guard aircraft/aviation equipment or injury, illness to personnel working on Coast Guard aircraft where NO intent for flight existed (e.g., towing, maintenance, run-ups, servicing, etc.). Ground mishaps imply no intent for flight and include maintenance or handling mishaps occurring on board ship.
- d. Coast Guard Auxiliary Aviation Mishaps. Damage to personal property or injuries sustained by the Auxiliary while under official orders shall be reported using the reporting guidelines in the Auxiliary Operations Policy Manual, COMDTINST M16798.3 (series).

NOTE: All personnel injuries or deaths involving Coast Guard aircraft, regardless of operational mode, must also be reported via the Coast Guard Mishap Reporting System (MISREP).

- e. Firearm Mishaps. An event involving the unintentional discharge of a firearm (including machine guns) or an intentional discharge that results in unintentional injury, fatality, or property damage. Firearms mishaps are of four types: operational, training, test, and recreational.
- f. Vessel Underway Operational Mishap. A mishap in which a cutter or small boat is underway or lying at anchor **and** the mishap is directly related to the accomplishment of an operational mission. This includes docking or undocking with the propulsion system energized.
- g. Vessel-Related Mishap. A mishap in which a cutter or small boat is underway, lying at anchor or moored to a fixed structure in a standby, maintenance, or repair status **and** the mishap is not directly related to the accomplishment of a current operational mission. Includes mishaps when a cutter or small boat is removed from the water (cradled, dry-docked, or in a marine railway). The vessel boundary includes the gangway, shore ties, and mooring lines to their attachment on shore.
- h. Shore Facility Mishap. Shore facility mishaps include injury/illness to Coast Guard personnel or damage to Coast Guard or members of Coast Guard Auxiliary (under orders), visitors, and contract personnel working on Coast Guard facilities or equipment. Mishaps also include damage to Coast Guard or Coast Guard Auxiliary (under orders) facilities, vehicles, or other equipment.
- i. Vehicle Mishap. Vehicle mishaps involving Coast Guard military personnel or active duty Reservists, on or off duty. Auxiliary mishaps

are reported only when personnel are operating under orders and civilian personnel in a duty status on or off a Coast Guard installation. Includes government and private vehicles, motorcycles, moped/scooters, bicycles and pedestrian mishaps.

- j. Recreation/Off Duty. Mishaps resulting from sports, recreation, exercise or other activity providing relaxation or enjoyment. This includes officially sponsored activities as well as off duty activities for military.

I. Mishap Investigations Boards.

- 1. Unit Permanent Mishap Board. Each unit shall assign a Permanent Mishap Board. Members of the board, as appointed in the Pre-Mishap Plan (see enclosure (15) to this manual), must be familiar with safety procedures and requirements of this manual, relevant directives, and preliminary mishap analysis procedures before a mishap occurs. Investigation actions by the unit's Permanent Mishap Board after a major mishap should be limited to:
 - a. Securing and protecting the mishap site and wreckage until the arrival of the Commandant's Mishap Investigation Board (MAB).
 - b. Documenting the mishap site and wreckage by written, taped, videotaped and photographed documentation of the wreckage, location of survivors and fatalities and the mishap site. This is especially important if wreckage and bodies must be disturbed before the MAB can arrive.
 - c. Photographing and videotaping to preserve otherwise perishable evidence and aid the investigation. Photograph liberally, but be selective when including photographs in the report.
 - d. Collecting Human Factors Evidence. Take blood and fluid samples of survivors, documenting evidence of mental and physical capability and medical opinion about individuals' ability to return to their duties. See Enclosure (4) for more guidance.
 - e. Safeguarding Electronically Stored Data. Immediately safeguard "continuously recorded" memory units. This can be accomplished by assuring power is not applied to the aircraft or memory unit or by removal of the unit. Failure to do so can result in the overwriting and loss of valuable mishap data. This includes crash survivable memory units in flight data recorders (FDR), electronic cockpit voice recorders (CVRs), and nonvolatile memory (NVM) chips on circuit cards from electronic engine controls, programmable navigation equipment, and other avionics. Contact Commandant (G-WKS) and (G-SEA) for guidance.
 - f. Witness Statements. Physical and documentary information is usually the most credible form of information, but witness accounts often provide important leads. Witnesses include those involved in the mishap, those who saw it, and those who's training and experience

qualify them as experts. See enclosure (2) and (4) to this manual for guidance on the collection of witness statements.

- g. Collecting and securing aircraft, boat crew training and administrative records and files.
 - h. The Unit Permanent Mishap Board should also be familiar with the Coast Guard Administrative Investigation Manual (AIM), Decedent Affairs and other U. S. Coast Guard investigations that may be required as a result of the incident. The Unit Permanent Mishap Board should be familiar with what type of mishap information can be shared with other investigations (see enclosure (10) of this manual).
2. Class A or B Commandant Mishap Analysis Board (MAB). MAB's will be appointed and convened at the discretion of Commandant (G-WKS) to investigate and report on Class A & B Mishaps. Enclosure (4) to this manual describes the Class A and Class B MAB composition and process. In cases where Commandant level review of mishap command policies, training procedures or equipment deficiencies are not anticipated, Commandant (G-WKS) may delegate this responsibility to the reporting custodian or an officer in the chain-of-command senior to the custodian. In these cases, Commandant (G-WKS) will specify the scope and requirements of the unit investigations. These boards vary in composition according to the circumstances of the mishap.
3. Commandant's Safety Board (CSB). Once the MAB's report (see 3.J.1.f below) for a Class A or B Mishap reaches Headquarters, a CSB shall be convened. Duties of the CSB:
- a. Review the MAB's report and endorsing comments and develop a CSB report for the Chief of Staff. The CSB Report shall include:
 - (1) A synopsis of the mishap.
 - (2) Classification and cost of the mishap.
 - (3) Determination of causal factors.
 - (4) Determination of additional findings.
 - (5) Determination of recommended corrective actions.
 - (6) Other remarks as appropriate.
 - (7) Information for final update of the Coast Guard Mishap Report and Data System (non-aviation).
 - (8) Development of a draft Commandant (G-CCS) Decision Letter.
 - b. Within 90 days of receipt of the MAB report, the CSB shall forward the CSB Report and a draft decision letter to the Chief of Staff (G-CCS) for consideration. After review, the Chief of Staff will issue a Final Decision Letter directing the corrective actions to be taken.
 - c. Commandant (G-WKS) will draft and transmit a Final Action Message

advising field units of the results of the investigation and corrective actions.

4. Class A or B Off-Duty Mishap Boards. MAB's will be appointed and convened at the discretion of Commandant (G-WKS) to investigate and report on Class A and B off-duty mishaps. In most cases, mishaps involving off-duty Coast Guard military personnel will be investigated by the member's permanent command and the results will be included in the required mishap report (see 3.J.2.c). This includes off-duty motor vehicle mishaps, sports, hobbies or permissible outside employment activities. The mishap report shall include the results of any outside (non U. S. Coast Guard) investigations. Local law enforcement investigation report and related documents should be a major source of information. If away from a member's permanent command, the permanent command may request that a local command conduct the investigation.
 5. Class C and Class D Unit Mishap Boards. Units shall generally conduct local investigations for Class C and D mishaps and the results of the investigation shall be included in the required mishap report (see 3.J.2). For high interest Class C, D or HIPO mishaps, a Commandant (G-WKS) MAB may be assigned to investigate the mishap or the unit may be tasked to complete and submit a formal report. The reporting custodian shall normally be the appointing and convening authority for Class C and Class D mishap investigations. Enclosure (4) to this manual provides information on the makeup of Class C and D Unit Mishap Boards.
 6. Joint Mishap Boards. In the event of a mishap involving the Coast Guard and other United States military aircraft or property, a joint board may be convened, if considered appropriate by both Commandant (G-WKS) and the Safety Chiefs of the service safety centers. Each service shall be represented on the Joint Mishap Board. The appointment of the MAB President, selection of board members and the report format, shall be by mutual agreement between Commandant (G-WKS) and the chief of the safety center involved.
 7. Auxiliary/NTSB Boards. By Memorandum of Understanding between the Coast Guard and the NTSB, Auxiliary aircraft mishaps will be investigated by the NTSB. A Coast Guard representative will be assigned to such investigations. Immediate initial reports to Commandant (G-OPF) and (G-WKS) are required to ensure timely NTSB notification. Preliminary and Supplemental Mishap Message Reports shall be filed.
- J. Mishap Reporting.
1. Class A and Class B Mishaps.
 - a. Immediate telephone report. (Not required for off-duty Class A or B mishaps.) Unit commanding officers or officers-in-charge shall immediately report all Class A and Class B to their Chain of Command. **Within four hours** of a Class A or B mishap, a telephone

report, by the Command, shall be made to the Coast Guard Headquarters Command Center (G-OPF), 202-267-2100. This initial report shall include as much information as is available and should include location, time, and injury to personnel and or damage to Coast Guard property. See Section 3.J.1.b below for additional immediate aviation telephone reporting requirements.

- b. In addition to Class A and B mishaps the following incidents, require an immediate telephone report to Coast Guard Headquarters:
 - (1) All Coast Guard mishaps likely to cause intense or unusual reaction from the public or news media.
 - (2) All Coast Guard mishaps requiring notification of the NTSB.
 - (3) A Coast Guard auxiliary aircraft involved in a Class A or Class B mishap while operating under written or verbal orders.
 - (4) A Coast Guard aircraft is involved in a mishap with a foreign aircraft, or a mishap occurring in a foreign country.
 - (5) Serious Near Midair Collision as discussed in chapter 2.
 - (6) Whenever deemed appropriate by the Commanding Officer or operational commander.
 - (7) Personal Casualty as discussed in Section 3L of this chapter.
- c. Preliminary Message Report. **Within 12 hours** of a Class A or Class B Mishap, a priority message report shall be sent to Commandant (G-WKS), MLCLANT (kse), MLCPAC (kse), the Area and the operational commanders, by the unit experiencing the mishap. The 12-hour delay is designed to allow for immediate rescue/recovery actions and for the collection of more detailed information. For aviation mishaps, follow the format specified in Enclosure (5) to this Manual and info AIG 8907. For vessel underway mishaps, follow the format specified in enclosure (6) to this manual. For all other mishaps, follow the format specified in enclosure (9) to this manual. This message should include as much information as is available.
 - (1) The preliminary message shall amplify and expand on the data provided during the immediate telephone report regarding location, time, and injury to personnel and/or damage to property.
 - (2) The preliminary message shall contain factual information only. It shall not contain information based on witness statements or other testimonies. If some of the required information is unavailable or incomplete, subsequent supplemental messages shall be sent.
 - (3) Do not list the names or social security numbers of members involved in the mishap on the message. If necessary, injury

reporting can be by crew position or rank.

- (4) If there are serious injuries, personnel missing or deaths involved, personnel data must be reported in a Personnel Casualty Report within four hours. (See Section 3.L of this chapter.)

d. Progress/Supplemental Message Report. A Progress/Supplemental message report shall be sent **within 72 hours** of a Class A or Class B mishap to Commandant (G-WKS) and appropriate headquarters offices. The MAB President shall send this message, or the unit, if the MAB has not convened. Progress/Supplemental messages shall be sent thereafter at the MAB President's discretion or as directed by Commandant (G-WKS). For aviation mishaps, use the format in enclosure (5) to this manual or optional MAB progress message format in enclosure (14) to this manual. For vessel underway mishaps, follow the formats in enclosure (6) to this manual. For all other mishaps, follow the format in enclosure (9) to this manual.

- (1) The MAB President shall send an arrival message notifying headquarters that all MAB members have arrived and that the MAB has assumed the investigation. This information may be included as part of the Progress/Supplemental message and the MAB progress message format in enclosure (14) to this manual may be used.
- (2) The MAB President shall send a supplemental message, if critical information is discovered, when the MAB adjourns and if it reconvenes.

NOTE: If the MAB discovers information that seriously impacts Coast Guard operations, the MAB President shall immediately notify Commandant (G-WKS) by telephone. A supplemental message shall be sent, regardless of whether such information is associated with the mishap under investigation. Commandant (G-WKS) will notify the appropriate Coast Guard Headquarters offices and other agencies and ensure that proper action is taken.

e. Final MAB Message. A final MAB message shall be sent when the MAB concludes the on site investigation and analysis. Because the final MAB process is not complete at this point, Commandant (G-WKS) shall be the releasing authority for the message. The President of the MAB shall confer with and receive Commandant (G-WKS) permission prior to release. The final message report shall contain:

- (1) A short factual synopsis of the event.
- (2) Date the MAB adjourned.
- (3) Description of damage.
- (4) Disposition wreckage and/or status of salvage operations.

- (5) Specific recommendations the MAB feels should be brought to the immediate attention of field commands.
 - (6) The message shall not contain opinions or speculation regarding the mishap.
 - (7) Upon receipt of the final MAB Message, Commandant (G-WKS) shall notify the reviewing chain of endorsement deadlines contained in this manual and offer MAB briefings to expedite the reviewing process.
- f. Commandant Mishap Analysis Report (MAR). Every Commandant appointed MAB should produce a MAR. Enclosure (2) to this manual provides a description and format for the MAR. Enclosure (3) to this manual provides a description and format for the Medical Officer's Report, which should be made part of the MAR when applicable.
- (1) Within 21 days after the MAB completes their on-site investigation and analysis, the MAB President shall forward the original MAR. The original MAR shall be forwarded to Commandant (G-WKS) via the commanding officer and appropriate chain of command for review and endorsement.
 - (2) Commandant (G-WKS) shall inform the endorsement chain, via message of endorsing deadlines and the importance of timely review.
 - (3) When desired, Commandant (G-WKS) shall provide funding for member(s) of the MAB to brief endorsers, to assist in understanding the incident and to streamline the review process.
 - (4) Because mishap reports contain sensitive and privileged material, it is imperative that the reports be controlled. Therefore, only a limited number of copies and copyholders are authorized. See enclosure (2) to this manual for specifics. The MAB President is the only MAB member authorized to keep a copy of the MAR. Reviewers in the chain are not authorized to hold a copy, and shall not be provided or reproduce a copy, unless requested of and authorized by Commandant (G-WKS). The MAB president will return his MAR copy to Commandant (G-WKS) after the Final Action Message is released.
2. All Mishaps. Commandant (G-WKS) maintains automated computer systems for the collection and analysis of mishap data. The type of mishap (see section 3.H.3 above) determines the type of message report that is required.
- a. Flight, Flight Related and Aviation Ground mishaps not requiring a formal MAR shall be reported by message following the format in Enclosure (5) to this manual. Class C Aviation mishap messages shall be submitted within 14 days. Class D and Class E Aviation Mishap messages shall be submitted within 21 days.

- b. Vessel Underway Operational Mishaps shall be reported by message following the format in enclosure (6) to this manual. Class C Vessel Underway Operational mishap messages shall be submitted within 14 days. Class D Vessel Underway Operational mishap messages shall be submitted within 21 days. For Class A or Class B Vessel Underway Operational mishaps, a Vessel Underway Operational Mishap message shall be included as part of the MAR (see section 3.J.1.e above).
 - c. All Other Types of Mishaps including vessel-related (non-operational) and shore mishaps shall be reported by message following the format in Enclosure (9) to this manual. Class C mishap messages shall be submitted within 14 days. Class D mishap messages shall be submitted within 21 days. For Class A or Class B mishaps an Enclosure (9) mishap message shall be included as part of the MAR (see section 3 J.1.e above).
 3. Annual Reports. Commandant (G-WKS) will produce and publish annual safety awareness reports for the aviation, shore and vessel communities. These separate reports will be distributed to the appropriate field commands and will include a summary and analysis of mishap data.
- K. Limitations on the Use and Disclosure of Mishap Investigations and Reports. A thorough understanding of the concept of privilege and confidentiality as used in the Safety Program is essential for the proper investigation of mishaps. Enclosure (10) to this manual discusses the use and restrictions of safety privilege. If the causal factors and the sequence of events that culminated in a mishap are to be determined and similar mishaps prevented, it is imperative that all parties involved either in the mishap or the administrative/legal investigation and mishap review process understand and honor the privileged nature of the information. These concepts are critical to the success of the Coast Guard Safety Program. The statements, material, and information obtained during a mishap investigation are for the sole purpose of mishap prevention and must be handled according to the provisions of this instruction.
- L. Personnel Casualty Reporting. Personnel Casualty Reporting is required in addition to Mishap Reporting when the casualty is the result of a mishap or may be a stand-alone requirement in a non-mishap personnel event. It is not within the scope of this chapter to address Personnel Casualty Reporting in detail.
 1. Immediate telephone notifications are required for Class A and B on-duty mishaps to chain of command, and the Preliminary Mishap Message Report is required within 12 hours for both on and off-duty Class A and B mishaps. See sections 3.J.1.a and 3.J.1.b of this chapter.
 2. Immediate telephone notification to HQ Command Center (202) 267-2100 is required for death or death imminent situations. In addition, a Personnel Casualty Report Message is required within four hours of receiving personnel casualty information whether the result of a mishap or other causes, on or off duty. Procedures, message instructions, and format reside in the Personnel

and Pay Procedures Manual, HRSICINST M1000.2, Section 5.A and enclosure (7) and in the Personnel Manual, COMDTINST M1000.6A, Chapter 11, Section A.

3. Though some message information will overlap, this ensures sufficient information is provided on the mishap and on the member's personal data, providing a wide distribution of the mishap information, yet protecting the member's privacy.
4. An Administrative Investigation may also be required in a personnel casualty case whether or not the result of a mishap. Contact Commandant (G-OPF) for additional information and see the Administrative Investigations Manual, COMDTINST M5830.1, Section G.4.

- 8-I-3. A notification checklist shall be included in the plan along with a list of personnel responsible for making the notifications.
4. **Additional Support**. As part of the pre-mishap plan, prior arrangements shall be made with other CG units and agencies to obtain necessary firefighting services, rescue and salvage equipment, security, divers, medical support, logistics, photographers, etc. For cutters, many of these arrangements can be made through the host command at the moorings, local authorities, or the operational commander. For small boat stations, many of these arrangements can be made by the Group Commander, and should be reflected in the Group pre-mishap plan. For further guidance on pre-mishap planning and investigation, see Chapter 3 of this manual.

MISHAP ANALYSIS REPORT (MAR) FORMAT AND ROUTING.

1. Preparation of the Mishap Analysis Report. The sole purpose of a Mishap Analysis Report (MAR) is to assist the Commandant in preventing future mishaps. The MAR is not a legal document, and it is not necessary to enclose documents unless they reveal unusual circumstances that are essential to clearly understanding the report or mishap. In the past, Mishap Analysis Board (MAB) reports have contained enclosures that were unnecessary to the report, i.e., copies of yellow sheets, blue sheets, flight plans, weather briefing, crew members training records, maintenance records and/or diagrams, etc. Do not include copies of all related paperwork (flight plans, log entries, personnel qualification records, etc.) unless they show significant problems or irregularities. Simply stating that the MAB examined these specific documents/records and found them in order is sufficient. The board only needs to comment in the report that the AC failed to sign the yellow sheet; the crew member(s) was current/non-current regarding training requirements, the crew filed a proper flight plan and received a weather brief, etc. Nice to have, but not essential, documents should be left out. Further guidance can be obtained from Commandant (G-WKS) during the investigation.

NOTE: Observations made about the unit by the MAB unrelated to the mishap are best handled via the MAB President during the out brief with the Commanding Officer.

2. Mishap Analysis Report (MAR) Preparation. The report shall be formatted in accordance with section 3 of this enclosure and prepared using standard Coast Guard word processing software. A disc containing the report shall be forwarded directly to Commandant (G-WKS) by the MAB President after the MAB adjourns. The MAR shall:
 - a. Be prepared on letter-size paper contained within a folding pressboard folder fastened at the top with two-hole fasteners. DO NOT use loose-leaf binders or notebooks.
 - b. Contain all privileged information on the RIGHT side of the folder. This includes the analysis, conclusions, recommendations, privileged witness statements, and all other information that is only known to the MAB due to its privilege status. Number the pages beginning with the cover sheet. (See enclosure (10), section 15.a.)

NOTE: Verbatim transcripts of statements or interviews shall not be made. Interviewers' notes or summaries are sufficient. After the final review and release of Chief of Staff's Final Decision Letter, the MAB President shall destroy all tapes and notes of privileged information.

- c. Contain all non-privileged information on the LEFT side of the folder. This includes synopsis, diagrams, photographs, lab analysis reports, all other enclosures, non privileged appendices, etc. List the enclosures on a cover sheet (See enclosure (10), section 15.b.)
- d. Securely attach all captions to the photographs. If possible, the captions should be placed so that the caption and the photographs can be examined simultaneously.

NOTE: Attaching captions that include speculations, conclusions, or opinions directly to the photograph renders the photograph a privileged document. If the captions can be redacted, the photocopy may be released under FOIA.

- e. Ensure that all copies are legible. Signatures are required on the original report, statements, appendices, and enclosures. If individuals are not available to sign the original documents, authentication of the document by the MAB is authorized. Copies of the formal MAR, statements, appendices, and enclosures do not require signatures or authentication, except when a copy is submitted in lieu of the original report.

3. Detailed Description of the Report.

- a. Cover Sheet. This page shall be labeled as follows:

Name of Unit/Custodian and mishap Class
Aircraft Model/Serial # / Class of Cutter/Small Boat (if applicable)
Pilot-in-Command/ Coxswain (if applicable)
Unit Commanding Officer/OIC
Date of Mishap

- b. Table of Contents. On this page, list titles and page numbers of all major paragraphs and enclosures.
- c. Synopsis. The synopsis page will present a brief factual summary of the mishap, property damage, injuries, occupational illnesses, deaths, and sequence of events. The synopsis should lead the reader through the sequence of events involved in the mishap. It should be a chronological summary of the facts, conditions, and circumstances as they occurred without reference to attachments. State why the mishap occurred, not how. Do not discuss the importance of facts or how they relate to the conclusions

NOTE: Do not identify personnel involved in the mishap by name or call sign in the synopsis. Instead, use such terms as "the flight lead," "the crane operator" or "involved personnel."

NOTE: The synopsis is releasable under the Freedom of Information Act (FOIA). Therefore, it should be a factual, complete recount of the mishap. No analysis should be included. Many FOIA requests are for a summary of the mishap not the actual report. In these cases, only the synopsis is released.

- d. Mishap Information. In this section, only information and data that relate to the mishap and the personnel involved are presented. All of the listed paragraph titles may not apply to all mishaps. Therefore, whenever a paragraph is deleted, the paragraph numbering will be changed from that indicated. The Mishap Analysis Report format should be adjusted by adding/deleting paragraphs. Should there be any questions concerning the report format, contact Commandant (G-WKS).

- (1) History. Under this subheading, describe in chronological order the

significant sequence of events that preceded the mishap. In some cases this can be achieved by using the radio log(s)/transcripts as a basis of time. Any evidence that is relevant, regardless of the source, may be added as long as it relates to established fact. A convenient introduction is to give a description of the mission, the departure point, the departure time and the destination. A description of the events could commence with the crew briefing and planning and proceed to departure, weather, navigational details, significant communications, and the sequence of events culminating in the mishap. It is important to give a word picture of the pertinent events and scenarios as they occur and what personnel involved in the mishap knew. The mishap site (Latitude/Longitude), local time, the elevation (if applicable), weather, visibility, etc. should be included in this section.

(2) Injuries to Personnel. Complete the following table (in numbers):

	CREW	PASSENGERS	OPERATOR	OTHER	TOTAL
INJURIES	-----	-----	-----	-----	-----
FATALITIES	-----	-----	-----	-----	-----
NO INJURIES	-----	-----	-----	-----	-----

(3) Damage to Unit. Give a brief statement of the damage sustained by the unit in the mishap. A complete, technical description of the damage will be made in Appendix D of the mishap analysis report.

(4) Other Damage. Give a brief description of the damage sustained by non-Coast Guard property. A complete, technical description of the damage will be made in Appendix D of the mishap analysis report.

(5) Personnel Information. Under this subheading, describe crew and operator qualifications, experience, and previous assignments. This description should provide at least the following:

- (a) Names, SSN, ranks, and ages.
- (b) Billet/Assignment. Give the position held or occupied when the mishap occurred, such as: pilot-in-command, engineer, copilot, navigator, coxswain, OOD, boarding officer, etc. For aviation mishaps include seat position and aircraft designation.
- (c) Aviation, vessel or job experience. Give details of job experience, involving job or equipment operated during the mishap. Provide type of aircraft flown, vessel sail, hours/time in type, total hours.
- (d) Details of recent training and mandatory periodic checks, and currency of training.
- (e) Time at unit; experience with route/familiarity with waters/AOR where mishap occurred.
- (f) Duty and rest periods.
- (g) Any other information considered significant.

- (6) Aircraft/Vessel Information. Describe the aircraft/vessel history and maintenance. The description should include:
 - (a) Type/serial number of aircraft or class of vessel and date of construction/manufacture.
 - (b) Damage that has resulted from previous mishaps.
 - (c) Major modifications/renovations to the structure or key components associated with the mishap.
 - (d) Defects, if any.
 - (e) Aircraft take off/landing data cards and weight and balance sheets.
- (7) Meteorological Information. Describe the forecasted weather conditions and any relevant observations of the actual weather conditions, with an after-case or appreciation of the weather in retrospect. This description should provide at least the following:
 - (a) Forecast weather, including route and destination forecasts available to the unit/personnel and details of weather briefings received prior to departure or in route.
 - (b) Weather observations at the time of the mishap.
 - (c) Actual weather conditions along the route and at the mishap site. On scene weather, sea conditions, seawater temperature and details of these conditions encountered along the track-line prior to the mishap.
 - (d) Natural light conditions at the time of the mishap day, night, twilight, moonlight, etc.
- (8) Aids to Navigation. Describe the availability of navigation facilities. This information should include the steps taken to establish the serviceability of the facilities at the time of the mishap. List navigation equipment carried and indicate whether an integrated navigation system was installed. Serviceability of this equipment should be stated. Details of maps, charts, approach plates, etc., available to crew and appropriate to the route should be included.
- (9) Communications. Describe the communications facilities available to the aircraft/vessel and their effectiveness. All communications with other agencies or vessels (Air Traffic Control, Vessel Traffic Service, Navy, Oceanic, etc.) relevant to the circumstances of the mishap should be included by reference to communication logs or transcripts of recordings. Include pertinent extracts only.
- (10) Airdrome and Ground Facilities (For Aviation Mishaps Only). Describe relevant information concerning airdrome installations, such as runway lengths, slope, obstructions, and runway conditions. Include airdrome lighting, approach lighting, VASI, and runway

lighting information.

- (11) **Flight Recorders/Voice Recorders (For Aviation Mishaps Only).** Provide any necessary critiques of the system; the condition, location, serviceability, functioning, capacity, parameter coverage, accuracy, and sampling rate that is relevant. If the recorder(s) operated properly, a short statement to this effect is all that is necessary. If not, the shortcomings should be described. The pertinent flight recorder/cockpit voice recorder readouts are not normally included in this section but are generally attached to the report as an appendix.
- (12) **Wreckage Description.** In relatively uncomplicated mishaps the entire wreckage examination may be described under this subheading. In major mishap investigations, however, it may be necessary to discuss the examination of the wreckage and the technical investigations under appropriate sections: e.g., structures, power plants, systems and human factors. The description in each section should embrace the significant facts determined by the group or specialist responsible for the detailed investigation. These special reports shall be contained in the mishap report as an appendix.
- (13) **Fire.** If fire occurred, describe the nature of the occurrence and of the fire fighting equipment used and its effectiveness. Appropriate comments on the training and coordination of personnel should be included.
- (14) **Survival Aspects.** Describe search, evacuation and rescue aspects. Note the locations of crew and passengers in relation to injuries sustained. Report on the effectiveness of personal protective equipment and whether it was used/worn.
- (15) **Tests and Results.** Describe the nature of any tests or research undertaken in connection with the mishap and state the results.
- (16) **Unit Response to the Mishap.** Describe the adequacy of the unit's pre-mishap and/or pre-fire plan. State when and how the response was initiated; and the status of the investigation when the Formal Mishap Analysis Board assumed responsibility for the investigation.
- (17) **Witnesses.** List all witnesses interviewed and whether they were offered and accepted privilege. For witnesses offered privilege a Witness Statement-Promise of Confidentiality Advisory Form (See Figure 2-1) must be included with their statement as proof that the individual was offered privilege and whether the witness accepted or declined the offer.

Figure 2-1 NOTE: This statement is for all mishaps in which confidentiality is offered. Every witness offered confidentiality shall read and sign this form. Copies of the form should be made on 8-1/2 by 11-inch paper for inclusion in safety reports.

Witness Statement Offer of Confidentiality Advisory Form

You are hereby advised that, as a witness to this safety investigation, your statement will be used solely for mishap prevention purposes. Your statement will not be made available to anyone other than United States Coast Guard officials responsible for the assembly and review of this safety investigation report.

I, (Name) _____,
(Rank/Rate/Grade) _____, (Organization) _____, have been advised by
(Name) _____ of the following:

- This investigation is being conducted under the provisions of COMDTINST M5100.47 solely for mishap prevention within the United States Coast Guard to determine all factors relating to the mishap and to prevent recurrence.
- I have been offered confidentiality concerning this statement. If I elect to have my statement treated as confidential, this means it will not be distributed outside the Coast Guard nor used within the Coast Guard as evidence to support any disciplinary action or adverse administrative action including, but not limited to line-of-duty status or pecuniary liability, or separation from the Coast Guard.
- Non-confidential witness statements may be released to the public pursuant to a Freedom of Information Act request or used in disciplinary or administrative proceedings. Only statements given under an offer of confidentiality are protected from release and use beyond safety purposes.
- Whether or not a statement is considered confidential, the chain of command will review the final mishap report, but the chain of command may only use confidential statements for safety and mishap prevention purposes.

I understand I am being interviewed as a witness in a mishap investigation and I acknowledge that an offer of confidentiality has been extended to me. I further understand the effect of this promise. I (do) (do not) desire my statement to be treated as confidential.

_____ (Signature) _____ (Date)

Verified and Witnessed by: _____ (Signature of person offering confidentiality) _____ (Date)

(To be completed after the witness has given a statement)

I (still desire) (do not desire) to have my statement to remain confidential.

_____ (Signature) _____ (Date)

Verified and Witnessed by: _____ (Signature of person having offered confidentiality) _____ (Date)

- (19) Classified Material. Describe possible impact or compromise of classified material resulting from the mishap. Include here, any recommendations for improvements.
 - (20) News Media and Public Reaction. Describe any effect or reaction on the news media or the public created by the mishap. Include here, any recommendations for improvements.
 - (21) Additional Data. Each causal factor should be a conclusion reached from the collected data. Add any essential paragraphs needed to support/illustrate the determination of each mishap causal factor.
- e. Analysis. In the analysis, it is not necessary to repeat any description of the evidence. However, the Board should review and evaluate the evidence and develop the various patterns, conditions and events that may have existed. This will lead to the formulation of hypothesis that may be tested against the evidence. Theories not supported by evidence should be eliminated. The justification for sustaining the validity of the remaining hypothesis or hypotheses should be stated. There should follow a description of the pattern or series of conditions and events that have been determined to be causal factors in the mishap, and reference should be made to the relevant evidence in support of the argument as it is developed.
 - f. Conclusion. Conclusions should indicate which aspects of the evolution contributed to the mishap and which did not. It is usual to report on certain features in every case, for example:
 - (1) The training and experience of the crew.
 - (2) The condition, stability or airworthiness/seaworthiness of the aircraft/vessel.
 - (3) Pre-mishap human error/equipment failure that contributed to or resulted in the loss.
 - g. Causal Factors. List all causal factors contributing to the mishap. Designate which cause factors need to be corrected to keep similar mishaps from occurring. Some factors, because of their importance, or because they can be easily corrected, tend to take priority positions. These factors should be described in a concise statement rather than just an abbreviated description of the circumstances of the mishap. If the investigation uncovers cause factors or findings requiring immediate corrective action beyond the unit level, Commandant (G-WKS) shall be notified immediately. The MAB President shall follow up on this initial report with an operational immediate message as soon as practical. Each causal factor should address who did what and why.
 - h. Recommendations. Recommendations are feasible solutions related to the causes of the damage, fatalities, or injuries in the mishap sequence of events. While recommendations are normally in response to causal findings, not every cause needs to have a recommendation. Well thought out recommendations are necessary for proper corrective action. Recommendations should be short, concise statements requiring no explanation and follow in a natural sequence

after the analysis, conclusion, findings, etc. Include recommendations not related to the causal factors of the mishap as “other findings or recommendations.”

- i. Signature Page. The names and rank/rate of all MAB members will be typed on a separate signature page. All MAB members will sign and date the MAR immediately above their typed name.
- j. Investigation and Report Preparation Work-Hours. On the signature page, list the estimated work-hours required for the mishap investigation and analysis and the estimated hours required to prepare the MAR.
- k. Distribution List. On signature page or the page immediately following, list number of copies made and the distribution. (See Figure 2-2).
- l. Appendices. Where appropriate, the following appendices need to be included in the MAR.
 - (1) Appendix A. A copy of the initial mishap message and all supplemental, progress and final messages in chronological order.
 - (2) Appendix B. MAB appointing order/messages.
 - (3) Appendix C. Personnel Information. In addition to the mishap crew, include pertinent information regarding other personnel, such as air traffic controllers, and maintenance personnel, etc., when relevant to the mishap.
 - (4) Appendix D. Damage Summary. A detailed description of Coast Guard and non-Coast Guard property damage. Include photographs and detailed sketches as necessary.
 - (5) Appendix E. Transcripts of pertinent recorded radio communications (air-to-ground and aircraft-to-aircraft). Begin the transcript as early in the mishap sequence as needed and end the transcript when all damage and injury has occurred. It is not necessary to include long term rescue/SAR transmissions. Because radio communication transcripts are factual data, they often provide a basis for information in the factual summary of circumstances.
 - (6) Appendix F. Transcripts of relevant portions of the cockpit voice recordings (CVR). The transcribed material is considered non-privilege. The actual CVR tapes are protected from release to the public based on the privacy interests of the aircrew and or the surviving family members.
 - (7) Appendix G. Films or videotapes documenting the actual mishap sequence or mishap scene (i.e., flight deck videos, films from bystanders) are not privileged material, should be located with this tab. List the tape or film on the index page. Animations made from flight recorder data are not privileged as long as they do not contain privileged safety information (i.e., MAB opinions, speculation, conclusions or other information known to the MAB. If the actual

audio of the mishap crew is voices incorporated into the animation, simulation or recreation, the tape with such audio is not releasable due to the privacy interests of the aircrew and or their surviving family members.

- (8) Appendix H. Photographs should be well-defined 8 by 10 inch. Photographs should show damage, impact areas, metal fractures, flight path, vehicle travel, etc. Use of scanned color images for reproduction in the formal report is preferred over use of actual photographs. Number the pages containing photographs (G-1, G-1, etc.). Do not mark the photographs themselves. To aid the reviewers, place an index of photographs at the beginning of the Tab. Do not refer to privileged information on the page captions or in the index. Staged photographs are considered privileged. Place staged photographs near the related text. Pointing with a finger or other device at a portion of wreckage does not make the photograph staged. Assembling or reconstructing damaged parts or aligning parts to show fire patterns or impact marks are examples of staged photographs. Depictions of cockpit indications for a given set of assumptions made by the MAB or described in witness statements are staged photographs.

NOTE: Do not include photographs of deceased personnel in the safety report.

NOTE: Include only photographs that aid in understanding the mishap.

- (9) Video of simulation, computer animation's or reenactments of a mishap prepared using input from MAB members or with knowledge of privileged safety mishap information are privilege. Commandant (G-WKS) may authorize use of MAB video simulations for mishap prevention purposes after the mishap review is finished. Reference these video simulations or reenactments in the MAR, and include the video simulation with the MAR original sent to Commandant (G-WKS) via the reviewing chain. Destroy all other copies of the video simulation when no longer needed by the MAB for analysis or briefing.
- (10) Appendix I and Subsequent. Add as many appendices as needed to support the investigation and the analysis. List appendices in the order referred to in the MAR. These could include, but are not limited to:
 - (a) Crew/witness Statements. Include only those statements essential to fully explain the mishap. Long statements from interviews should be summarized or paraphrased to include necessary portions only; legal, word-for-word transcripts shall not be made from interviews. Instead of including lengthy witness answers about background information, it will suffice for the MAB to simply comment on the reliability and experience of specific witnesses. Include the Witness Statement-Promise of Confidentiality Advisory Form (Figure 2-1) for each witness that was granted privilege.

- (b) Include messages, lab reports, diagrams, drawings, photographs, etc., as necessary to clarify the report for reviewers

NOTE: It is sufficient to show a listing of documents or records reviewed by the MAB and their effective dates. Do not mark, highlight, or extract a particular page to show the MAB's exact area of interest. The MAB's conclusion that a particular paragraph of a document was or was not a mishap factor is privileged. This also applies to comments or conclusion made by the MAB of documents such as training and personnel records.

- (c) Statement by maintenance officers.
- (d) Weight and balance form, flight plans, weather briefing and other critical data or forms. Include only those forms supporting a cause factor.
- (e) Applicable portions of Op-Orders, Comm-Plans, etc. Include only required or appropriate sections.
- (f) Medical Officer's Report (if applicable). See enclosure (3) of this manual.
- (g) Results of engineering investigations, analysis, etc.

- 4. Number of Copies. Because mishap reports contain sensitive and privileged material, it is imperative that the reports be controlled. Therefore, only a limited number of copies and copyholders are authorized. The MAB President is the only MAB member authorized to keep a MAR copy. Reviewers in the chain are not authorized to hold a copy, and shall not reproduce or be provided a copy, unless requested of and authorized by Commandant (G-WKS). See Figure 2-2 of this enclosure for specifics. Commandant (G-WKS) maintains the original copy of the MARs. The original MAR and all copies (including the MAB President's) are to be returned to Commandant (G-WKS) for destruction after the Final Action Message is released.

NOTE: MISHAP REPORTS CONTAIN SENSITIVE, PRIVILEGED MATERIAL. UNDER NO CIRCUMSTANCES SHALL ADDITIONAL COPIES OF MISHAP REPORTS BE MADE WITHOUT THE EXPRESS PERMISSION OF COMMANDANT (G-WKS).

- 5. MAR Labeling.

- a. The original MAR and copies shall be labeled in the center of the cover:

COAST GUARD (TYPE) MISHAP
UNIT
CLASS: (A or B)
DATE:
RESOURCE TYPE/SERIAL NUMBER:
COPY(*)

- * Mark according to TABLE 2-2 (i.e., ORIGINAL, COPY 1/UNIT FILE, etc., as appropriate).

- b. The following notice shall appear on the MAR immediately after the initial heading identifying the mishap

**MISHAP ANALYSIS REPORT
FOR OFFICIAL USE ONLY
SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH
COMDTINST M5100.47 (series)**

- c. The following notice shall appear immediately after the initial heading identifying the mishap and on each page containing privileged information

////////////////////////////////////

FOR OFFICIAL USE ONLY

**WHAT FOLLOWS MAY CONTAIN PRIVILEGED SAFETY
INFORMATION. UNAUTHORIZED DISCLOSURE OF THE
INFORMATION IN THIS REPORT IS PUNISHABLE UNDER ARTICLE 92,
UNIFORM CODE OF MILITARY JUSTICE AND MAY ALSO BE GROUNDS
FOR DISCIPLINARY ACTION UNDER CIVILIAN PERSONNEL
REGULATIONS**

////////////////////////////////////

- d. The following notice shall appear immediately before the subject line of the mishap message and subsequent endorsements:

**UNCLAS FOUO //N05100// or //N03750//
WHAT FOLLOWS MAY CONTAIN PRIVILEGED SAFETY
INFORMATION. USE FOR MISHAP PREVENTION PURPOSES
ONLY.**

- e. Mailing Envelopes/Outside Covers. Mailings and Mishap Analysis Report Covers should be stamped:

**FOR OFFICIAL USE ONLY SPECIAL HANDLING REQUIRED IN
ACCORDANCE WITH COMDTINST M5100.47 (series)**

- 6. Distribution. Distribute copies as appropriate. (See Figure 2-2).

Figure 2-2

Mishap Analysis Report Distribution

Aviation Mishaps

MARK

FORWARD TO

Original	G-WKS-1, via reviewing CO, District & Area. (Vessel Commanding Officer and ATC Mobile, as appropriate)
Copy 1/Unit	Unit: retain until Final Action Message is released
Copy 2/MAB President	MAB President retain until Final Action Message is released

Encl. (2) to COMDTINST M5100.47

Copy 3/G-OCA	Forward to G-WKS; retain until Final Action Message is released
Copy 4/G-SEA	Forward to G-WKS, retain until Final Action Message is released
Copy 5/G-WKH	Forward to G-WKS, retain until Final Action Message is released

All copies of the MAR will be returned to G-WKS after the Final Action Message is released

Vessel Mishaps

MARK

FORWARD TO

Original	G-WKS-4, via reviewing CO, District & Area.
Copy 1/unit file	Unit file
Copy 2/MAB President	MAB President
Copy 3/G-OCU (cutters) G-OCS (small boats)	Forward to G-WKS; retain until Final Action Message is released

All copies of the MAR will be returned to G-WKS after the Final Action Message is released

Shore Mishaps

MARK

FORWARD TO

Original	G-WKS-2, via reviewing CO, District & Area
Copy 1/unit file	Unit file
Copy 2/MAB President	MAB President
Copy 3/G-SEC	Forward to G-WKS; retain until Final Action Message is released

All copies of the MAR will be returned to G-WKS after the Final Action Message is released

7. Delivery of Mishap Analysis Reports. When the MAB has completed its analysis and prepared the report, the MAB President shall deliver the original and all copies, less the MAB President's copy, to the Commanding Officer for his review and endorsement. At this time, the MAB President shall also debrief the Commanding Officer regarding the results of the analysis. The MAB President will notify G-WKS to coordinate and release the MAB's final message and make arrangements for the

release of the aircraft and/or wreckage, as appropriate.

8. Mailing of Mishap Analysis Materials.

- a. Mishap Analysis Reports. A double envelope system shall be used in mailing MAR's. Mark the inner envelope with the address of the person/office who is to receive the report, along with the following information:

**FOR OFFICIAL USE ONLY
SPECIAL HANDLING IN ACCORDANCE WITH
COMDTINST M5100.47 (series)**

- b. Mailing of Recorded Tapes. Audio tape/cassette recordings and videotapes may be included in the MAR. Forward these items as follows:
- (1) Protectively package the materials to avoid breakage by rough handling.
 - (2) Mark outside of package, "**MAGNETIC TAPE, DO NOT X-RAY.**"
- c. Handling and mailing Mishap Animation Tapes. If mishap animations are created from the CVR/FDR data or other mishap data, the original shall be forwarded to G-WKS-1 with the original MAB via the reviewing chain.

9. MAR Review and Endorsement. The major purpose of a mishap report is to initiate corrective action to prevent similar mishaps in the future. This is important to keep in mind during the review process. Only through objective, thorough, and critical investigation and review will the Coast Guard be able to institute the necessary corrective action to prevent future mishaps. Endorsement shall not contain any reference to disciplinary action, personnel or medical boards.

- a. The Commanding Officer.
- (1) Shall review and endorse the report. Comment upon each causal factor, additional findings, and recommendations of the mishap board. If he does not concur with the causal factor(s), additional finding(s), or recommendation(s) submitted by the mishap board, he will present an analysis of his reason for non-concurrence.
 - (2) If a need for local action is indicated, state the specific action that has been or will be taken to correct the situation and to prevent such future mishaps.
 - (3) If the mishap involved human error cause factor(s), provide a personal evaluation of the individual(s) involved, their attitudes and past performances, including deficiencies.
- b. All Other Reviewing Officials.
- (1) Review the mishap report to evaluate the circumstances surrounding the mishap and initiate action, as appropriate, to correct deficiencies disclosed. If a reviewing officer does not concur with the causal factors, additional finding(s), or recommendation(s) submitted by the mishap board, or disagrees with comments/actions taken by the

Commanding Officer, the reviewing officer will present an analysis of the reason for non-concurrence in the endorsement.

- (2) Make appropriate recommendations to prevent similar future mishaps. State specific actions that have been or will be taken on recommendations that can be resolved at that reviewing level.

NOTE: To facilitate review by the endorsing chain, all reviewers should ensure comments coincide with the paragraphs of the MAB (remarks should follow the same format as the reports).

NOTE: To facilitate review by the endorsing chain, all reviewers should limit comments to those linked to specific facts, findings and recommendations contained in the MAR.

10. Reviewer Deadlines. Timely review of the formal Mishap Analysis Report is a critical process of preventing future mishaps. Delays at this stage can result in further loss and/or injury.

- a. Within 21 days after the MAB completes their on-site investigation and analysis, the MAB President shall forward the original MAR. The original MAR shall be forwarded to Commandant (G-WKS) via the Commanding Officer and appropriate chain of command for review and endorsement.
- b. MAR reviewers shall **review, endorse and forward the MAR via the chain of command within 15 workdays of receipt.** Unit Commanding Officer shall notify Commandant (G-WKS) when finished.
- c. Commandant (G-WKS) shall advise the endorsing chain of associated deadlines and requirements for timely review via message. Commandant (G-WKS) will provide briefings to the endorsers by the MAB to expedite review. Requests for review extensions will not normally be granted and must be specifically requested through Commandant (G-WKS).

11. Headquarters Review and Disposition of MAR's.

- a. The Commandant's Safety Board shall review all Class A and B MAR's and submit a report to Commandant (G-CCS) within 90 working days. Their report shall include but is not limited to:
 - (1) Synopsis of the mishap.
 - (2) Classification and cost of the mishap.
 - (3) Determination of the causal factors.
 - (4) Determination of the additional findings.
 - (5) Determination of the recommendations.
 - (6) Other remarks as appropriate.
 - (7) Information for the final update of the Coast Guard Mishap Report and Data Systems (non aviation mishaps).
 - (8) Development of a draft Commandant (G-CCS) Decision Letter.
- b. Review of all other (Commandant-appointed) formal MAB reports will be

reviewed by the Commandant's Safety Board. Resulting reports to Commandant (G-CCS) shall be determined on a case-by-case basis.

12. Commandant (G-CCS) Review. Commandant (G-CCS) will review all Commandant Safety Board reports and issue a Final Decision Letter to the appropriate command(s)/authorities, via the chain of command. The Final Decision Letter shall direct the implementation of corrective action, if appropriate. The Final Decision Letter is not privileged.
13. Dissemination of Mishap Information to the Field.
 - a. Final Action Message. The Final Action message is a brief summary of the Final Decision letter. Commandant (G-WKS) will draft and transmit this message to advise field units of the results of the investigation and review process.
 - b. Optional Sources. For particularly noteworthy or critical mishaps, Commandant (G-WKS) may further disseminate mishap safety information through various alternate methods, including:
 - (1) Articles in Coast Guard publications, such as the *Coast Guard* magazine and *Flight Lines*.
 - (2) Incorporate into Crew Resource, Team Coordination and Maintenance Resource Management training.
 - (3) Special interest newsletter articles.
 - (4) Federal or commercial safety publications.
 - (5) Electronic mailings to Commanding Officer and/or Safety Officer distribution lists.

MISHAP BOARD APPOINTMENT, COMPOSITION AND PROCEDURES.

1. Mishap Board Appointment and Composition. A mishap board shall be appointed as soon as practicable to analyze each Coast Guard mishap.
 - a. Class A and Class B Commandant Mishap Boards (MAB). Commandant (G-WKS) is the appointing and convening authority for all Class A and Class B Mishap Analysis Boards. Commandant (G-WKS) may delegate this responsibility to the reporting custodian or an officer in the chain-of-command senior to the custodian if it is deemed that a Commandant Board is not warranted. In these cases, Commandant (G-WKS) will specify the scope and requirements of the investigation. These MABs may vary in composition according to the seriousness/complexity of the mishap and the type of report required. Commandant (G-WKS) will determine the composition of the MAB. Generally, Class A and Class B mishap boards are comprised of the following membership (as appropriate):
 - (1) A MAB President, senior to the personnel involved in the mishap and not in the mishap unit's chain-of-command. If the MAB President desires, and circumstances warrant, he/she may request replacement by a new MAB President senior to the commanding officer or operational commander. For aviation mishaps, the MAB President must be a designated aviator. For vessel mishaps, MAB President will have served as commanding officer of the same type of unit as that involved in the mishap. The MAB President will generally be selected by Commandant (G-OCA), (G-OCU), (G-OCS), or (G-SEC).
 - (2) An Engineering Officer qualified in the mishap aircraft type or familiar with the class of vessel or shore facility involved. Consideration should be given to assigning a Warrant Officer for Engineering Support. Commandant (G-SEA), (G-SEN) or (G-SEC) generally chooses the engineering member.
 - (3) A Medical Member or Flight Surgeon if personnel injuries are involved. See section 4 of this enclosure for medical officer responsibilities. The medical officer is generally chosen by Commandant (G-WKH).
 - (4) A Flight Safety Officer qualified in the mishap aircraft type for Aviation Mishaps. This member is selected by Commandant (G-WKS-1).
 - (5) For Aviation Mishaps: A Coast Guard Surface Operations representative shall be assigned when a surface vessel or boat is involved in a mishap with a Coast Guard aircraft.
 - (6) For Vessel and Shore Mishaps: An MLC (kse) safety specialist familiar with mishap investigation procedures.
 - (7) Aviation Standardization Instructor pilot and an enlisted Standardization member, qualified in the mishap aircraft type shall

normally be assigned for aviation mishaps.

- (8) A senior AST should be assigned to all aviation mishaps involving aircrew injuries, fatalities, or incidents where aviation life support equipment was used or should have been used.
- (9) Other knowledgeable personnel or technicians may be assigned as conditions warrant.

NOTE: For Class B mishaps, where Commandant (G-WKS) does not convene an MAB, the composition of the unit level investigation board shall be directed by the commanding officer. Ad hoc members from outside the mishap unit maybe requested and will be provided by Commandant (G-WKS).

- b. Class C and Class D Unit Mishap Boards. The cognizant commanding officer shall normally be the appointing and convening authority for Class C and Class D mishaps. However, for Class C or Class D mishaps deserving senior management scrutiny, Commandant (G-WKS) may convene a full or partial MAB. A written convening order is not required. A local unit investigation and submission of the results in the required mishap report is satisfactory. Depending on the circumstances these boards usually include one to three members. Board members need not be senior to the involved person-in-command. A Flight Surgeon or Medical Officer shall be assigned to mishap boards that involve injuries or human factors events.

2. Appointment of Non-Coast Guard Personnel to Mishap Boards.

- a. Members from other Services/Armed Forces, the United States Public Health Service, and Flight Surgeons or medical officers are routinely assigned as board members as appropriate.
- b. Designated personnel of other Armed Forces may serve as members of Coast Guard mishap boards when mishaps involve military members from other services in an exchange program, resources in which the other services have considerable expertise, or when qualified Coast Guard personnel are unavailable.
- c. Technical Observers. Commandant (G-WKS) may assign additional Coast Guard, other military or civilian personnel as observers/technical experts to assist the investigation. An invited observer will not be a member of the board, but may participate in the board's investigation and analysis to the extent considered warranted by Commandant (G-WKS).
- d. National Transportation Safety Board (NTSB)/Federal Aviation Administration (FAA) may request or elect to investigate or participate in, any Coast Guard mishap investigation.

3. Mishap Board Membership Prohibitions. The following personnel are prohibited from serving as members of Commandant MAB's or participating in their proceedings:

- a. Members of fact-finding Bodies. Personnel who are members of the fact-finding body that is conducting the legal or administrative investigation of the

mishap.

- b. Personnel or Crewmembers Involved in the mishap cannot serve as members.
 - c. Personnel in Unit's Chain of Command. No member of the Board will be in the direct chain of command of the unit involved in the mishap.
 - d. Personnel Who Have A Personal Interest. If it becomes apparent that a member of the mishap board has a personal interest in the mishap, that member shall be replaced. Normally, it will not be necessary to duplicate proceedings completed prior to the change in membership. The new member shall be thoroughly indoctrinated concerning all aspects of prior proceedings before the analysis is continued.
4. Overview of the Mishap Investigation and Analysis Process. The following is a broad outline of the mishap investigation and analysis process.
- a. The Basic Examination. The initial investigative work where information is collected from the field and from witnesses, records, autopsy, etc. This investigation also covers the examination of management and supervisory processes involved.
 - b. Analysis of the Evidence. A list is made of possible scenarios (theories) that are supported by facts. The theories are tested. If further information is necessary to either prove or disprove a theory, then this information is obtained.
 - c. In-depth Investigation. As the investigation narrows the probable scenarios, there may be the need for information that can only be obtained by detailed disassembly of components and/or laboratory analysis.
 - d. Final Analysis. Once all the possible information that has been gathered, the MAB must determine the cause factors or the most probable cause factors. In almost every mishap there are going to be anomalies that cannot be explained. The preponderance of information takes precedence. Not everything must be proven beyond a shadow of a doubt. Often, the most likely causes are all that can be cited. If the information shows that a hazard may have caused the injury to personnel or property damage, then it should be corrected.
 - e. Recommendations. Recommendations are feasible solutions related to the causes of the damage, fatalities, or injuries in the mishap sequence of events. Recommendations should be short, concise statements requiring no explanation and follow in a natural sequence after the analysis, conclusion, findings, etc.
5. Witness Statements. Investigators may take statements from all individuals concerned with the mishap or who were eyewitnesses. A promise of confidentiality may be given to any witness who the mishap investigator, in his/her discretion, determines should be extended such a promise. These promises should be given only as needed to ensure forthright cooperation of a witness and not given on a blanket basis to all witnesses. Individuals interviewed by the MAB will not testify under oath. If a witness is granted a promise of confidentiality by the MAB, they should be

advised their statement (oral or written) will be used for safety only and will be protected by the safety investigation privilege from disclosure or use in the event of administrative, punitive or legal actions. Refer to enclosure (10) of this manual for further discussion of confidentiality.

- a. This assurance is given to obtain complete and candid information about the circumstances surrounding the mishap. Without this assurance, a witness might withhold certain important information by invoking constitutional rights of a self-incriminating nature. As a result, the actual mishap causal factors would remain hidden, curtailing effective mishap preventive measures. Witnesses are not limited to testimony acceptable to a court, but may be invited to express personal opinion or to speculate as to the probable mishap causal factors.
 - b. These promises must be explicit and not implied from the investigator's status or function. Whenever a witness gives a statement pursuant to a promise of confidentiality, it shall be documented as described in Enclosure (2) and (10). These promises should be given only as needed to ensure forthright cooperation of a witness and not given on a blanket basis to all witnesses. In each instance, the promise of confidentiality shall be strictly limited to only the information provided directly by the witness to the safety investigation. The witness will be told that the promise does not extend to testimonial information provided to other investigations, even if it is the same information.
 - c. All those with access to privileged reports and resulting products must ensure the restrictions on handling mishap information are enforced. It is the responsibility of the safety staff to ensure individuals working with, or having access to such materials are knowledgeable of the limited use and the required protection of such materials. All levels throughout the mishap investigation and review process must respect the overlying principle of safety privilege and confidentiality.
 - d. Do not advise witnesses of their Article 31, UCMJ or 5th Amendment Rights.
 - e. Do not have witnesses testify under oath or give sworn testimony. Ensure witnesses understand they are obliged to give honest, good faith statements.
 - f. Verbatim transcripts of interviews will not be made. The report should rely on interviewer's notes or summaries of interviews.
6. Promise of Confidentiality. Where a promise of confidentiality has been extended a Witness Promise of Confidentiality Advisory form (See Figure 2-1 in Enclosure (2)) must be signed and included with the statement and must be read onto all tape recordings of interviews:
- a. Where a promise of confidentiality has been extended summaries of witness interviews must have the Witness Statement--Promise of Confidentiality Advisory form attached.
 - b. A list of witnesses interviewed shall be included in the MAR and it should indicate whether each witness was granted confidentiality.

- c. Only members of the mishap investigation (MAB, the unit permanent mishap board or a safety officer) may offer promises of confidentiality to witnesses. Accordingly, all such statements are PRIVILEGED and are protected from disclosure to unauthorized personnel.

NOTE: Select only meaningful statements and information to include in MAR. *It is not necessary to publish every statement taken from every individual interviewed.* Place the selected statements of each individual together in chronological order with the earliest on top to make it easier to compare the individual's impressions.

NOTE: Failure to observe the prohibitions and mandatory provisions of this enclosure by military personnel may be a violation of Article 92, *Uniform Code of Military Justice* (UCMJ). Violations by civilian employees may result in administrative disciplinary action without regard to applicable criminal or civil sanctions for violations of related laws.

Privileged safety information shall not be used to support disciplinary or administrative action, in determining the misconduct or line-of-duty status of any personnel before any evaluation board. Nor shall this information be used to determine liability in claims for or against the Government.

7. Access to Witnesses. Safety investigators may need frequent access to or multiple interviews with participants in a mishap. The MAB shall have priority access to the witness over all other investigation boards. This priority access will ensure the MAB hears the initial recollections and impressions from the witnesses. The Commanding Officers will make all participants available to investigators upon request of the MAB president. The MAB president will advise the Commanding Officer when participants are no longer needed. Safety investigators make no determinations regarding the fitness of participants to be returned to normal duties.
8. If the MAB suspects that a member may have committed an offense under the UCMJ, the MAB shall contact Commandant (G-WKS) for guidance before conducting or continuing the interview of that member. Commandant (G-WKS) shall contact Commandant (G-LGL) to discuss whether the safety information or the military justice concerns take precedence. Commandant (G-WKS) shall instruct the MAB president to either cease or continue interviewing the individual.
9. Medical Officer Responsibilities. Examinations will be recorded and reported by the medical officer using The Medical Officer's Report in Enclosure (3). Examinations should be as complete as the examinee's condition and other circumstances permit.
 - a. Survivors shall be treated/examined at the first opportunity. Blood and urine tests are required for all class A and B mishaps, and for class C and D mishaps if human physiological factors are suspected. Samples shall be taken from military members as soon as possible after the mishap. Laboratory tests are listed on Form A, Section II of the Medical Officer's Report. See enclosure (3), Figure 3-1 of this manual. Label the specimens with name, SSN, date and time taken. Specimens should be prepared and stored as required by the receiving medical laboratory. Samples needed from each person are as follows:
 - (1) Blood, two "red top" tubes, 10 ml each.

- (2) Urine, minimum of 50 ml.
- b. Additionally, testing after a mishap may also be required for civilian employees. Contact your servicing civilian personnel office for guidance on civilian testing procedures.
- c. All personnel involved in class A and class B mishaps shall receive a complete physical examination by a military medical officer prior to returning to full duty. Not only should the examination cover obvious injuries, but also consider future developments, e.g., x-rays of back and neck, in the case of hard aviation landings, etc. This examination shall be recorded on Standard Forms 88 and 93, and these forms shall be included in the Medical Officers Report. See enclosure (3) of this manual.
- d. Deceased Members. Remains should be taken into custody, covered, protected and transported to a safe holding, if necessary, until released to the custody of the medical officer/Flight Surgeon. Do not allow remains to be photographed by non-investigators.

10. Autopsies.

- a. Purpose of Autopsies. It might be impossible to determine the causal factors in a fatal mishap unless autopsies are performed. Fatal mishaps have been caused by hypoxia, toxic gas, disabling occurrences such as heart attacks and other physical disabilities that can only be determined by autopsy. Discovery of these physical factors not only can determine the true causal factors, but can also provide medical authorities with information for the establishment of future personnel physical requirements. Autopsies also provide program managers and design engineers with information for improving the crash survivability of cockpits, cabins and compartments.
- b. Authorization to Perform Autopsies. The authorization to perform and autopsy in the event of a fatal mishap may involve one or more of three parties; the next of kin, local civil authorities and the Commanding Officer. If death occurs on board a Coast Guard unit, and if the state has not retained concurrent legal jurisdiction at that unit, then the commanding officer may authorize an autopsy. Under these circumstances, the permission of the next of kin is not required; nevertheless, it is desirable that every effort be made to obtain concurrence from the next of kin. If death occurs within the jurisdiction of civil authorities, authorization is the responsibility of the civil authority and may or may not require permission of the next of kin, depending on local law. Commanding Officers must be familiar with the reasons that require an autopsy and, where responsibility for authorizing an autopsy rests with local authorities, should advise those authorities of the need for an autopsy.
- c. Personnel to Perform the Autopsy. Whenever possible, an autopsy should be performed by personnel from the Armed Forces Institute of Pathology (AFIP). These personnel are available on short notice to assist Coast Guard MABs. To arrange AFIP assistance in performing an autopsy, contact Commandant

(G-WKH). If AFIP is unavailable, a qualified Pathologist should perform the autopsy.

- d. Autopsy Reports. The report of an autopsy shall be prepared in the original with three copies plus any additional copies needed for the medical officer's files. The original and two copies shall be forwarded as a part of the Medical Officer's Report. The third copy will be forwarded to the Armed Forces Institute of Pathology, Washington, D.C. 20305.
11. MAR Preparation and Routing. A formal Mishap Analysis Report (MAR) shall be submitted for every Commandant appointed MAB. Other reports are considered informal reports. See Enclosure (2) to this manual for information and guidance on preparing and routing MAR's.
 12. Time Limits. Timely review of formal MAR's is a critical process of preventing future mishaps. Delays at this stage can result in further loss and/or injury.
 - a. The MAB President shall submit the MAR to Commandant (G-WKS), via the commanding officer and the appropriate chain of command, **within 21 days** after the MAB completes their on-site investigation and analysis. Extension of Deadlines must be approved by Commandant (G-WKS).
 - b. Unit Commanding Officer shall notify Commandant (G-WKS) when finished. G-WKS shall advise endorsing chain of the associated deadlines and requirements for timely review via message.

NOTE: No additional copies of the MAR shall be made without the express permission of Commandant (G-WKS).

- c. MAR reviewers shall review, endorse and forward the MAR via the chain of command **within 14 days of receipt**.
13. Delays. Timely dissemination of mishap information is critical to the Coast Guard Safety Program and very important to personnel in the field. In the event that the investigation cannot be completed and/or the report cannot be forwarded within the prescribed period, the responsible member shall notify Commandant (G-WKS) to request an extension. Reviewers should expect notification by message, through the chain of command, of missed deadlines.

FORMAT AND DIRECTIONS FOR COAST GUARD AVIATION MISHAP MESSAGE

FM (UNIT NAME)

TO COMDT COGARD WASHINGTON DC//G-WKS/G-OCA/G-SEA//

AIG EIGHT NINE ZERO SEVEN (Aviation mishaps of interest to all aviation units)

(AIG 8907 is currently the only AIG for aviation mishap messages)

(CO's should readdress msgs to deployed crews, as appropriate)

(Add MLCA (kse) and MLCP (kse) if personnel injury or casualty involved)

(Other Addressees as appropriate)

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WHAT FOLLOWS MAY CONTAIN PRIVILEGED SAFETY INFORMATION.

USE FOR MISHAP PREVENTION PURPOSES ONLY.

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SUBJ: AIRSTATION____, AIRCRAFT TYPE AND OPMODE____, CLASS__ MISHAP

(NOTE: Information in SUBJ line should accurately reflect the mishap involved.

SUBJ line is used for identification and message sorting and is not part of the

AVIATRS database.)

A. SAFETY AND ENVIRONMENTAL HEALTH MANUAL, COMDTINST M5100.47

(Include other references as necessary.)

1. AIR STATION OR UNIT:_(CGAS EASTCOAST)_, MISHAP REPORT NUMBER:_(3-96)_.
2. AIRCRAFT TYPE:__(See list number 1)__, COAST GUARD IDENTIFICATION NUMBER CGNR:_(aircraft tail number)_.
3. MISHAP DESCRIPTION:__(One or two sentences briefly summarizing the mishap, one line descriptor of mishap)_.
4. OPMODE:__(See list number 1)__, CLASS:__(See definitions and list number 2)_____.

5. DATE:_____, LOCAL TIME:_____, PERIOD OF DAY:__(Light conditions based on time of day and time of year) (See list number 3)____.

6. LOCATION OF MISHAP:_____, LAT/LONG:___-___N/___-___W. (Brief description of where mishap occurred and as appropriate 00-00N/000-00W).

7. WEATHER AT TIME/PLACE OF MISHAP:__(sky/cloud conditions, visibility, wind, sea state, temperature, etc.)_, METEOROLOGICAL CONDITIONS:__(See list number 4)_, OBSTRUCTIONS TO VISIBILITY:__(if appropriate or a factor) (See list number 5)_____.

8. FLIGHT INFORMATION.
A. MISSION:_(See list number 6)__, FLT TIME:____(0.0 hrs)____, FLT PLAN/CLEARANCE: __ (See list number 7)_, DESTINATION:_(Final destination of flight)_.
B. PHASE OR EVOLUTION AT TIME OF MISHAP:_(See list number 8)_, AIRSPEED:_(in kts)_, ALTITUDE:_(Altitude at time of mishap.) (See list number 9)_____.

9. AIRCREW INFORMATION.
A. PILOT AT CONTROLS:__(See list number 10)__, SEAT POSITION:____(See list number 11)____, DESIGNATION:__(See list number 12)____, TOTAL FLIGHT TIME:____, FLIGHT TIME IN TYPE:____, FLIGHT TIME LAST 30 DAYS:____, MONTHS AT UNIT:_____.

B. PILOT NOT AT CONTROLS: __ (See list number 10)__, SEAT POSITION:____(See list number 11)____, DESIGNATION:__(See list number 12)____, TOTAL FLIGHT TIME:____, FLIGHT TIME IN TYPE:____, FLIGHT TIME LAST 30 DAYS:____, MONTHS AT UNIT:_____.

9. AIRCREW INFORMATION.
A. PILOT AT CONTROLS:__(See list number 10)__, SEAT POSITION:____(See list number 11)____, DESIGNATION:__(See list number 12)____, TOTAL FLIGHT TIME:____, FLIGHT TIME IN TYPE:____, FLIGHT TIME LAST 30 DAYS:____, MONTHS AT UNIT:_____.

B. PILOT NOT AT CONTROLS: __ (See list number 10)__, SEAT POSITION:____(See list number 11)____, DESIGNATION:__(See list number 12)____, TOTAL FLIGHT TIME:____, FLIGHT TIME IN TYPE:____, FLIGHT TIME LAST 30 DAYS:____, MONTHS AT UNIT:_____.

9. AIRCREW INFORMATION.
A. PILOT AT CONTROLS:__(See list number 10)__, SEAT POSITION:____(See list number 11)____, DESIGNATION:__(See list number 12)____, TOTAL FLIGHT TIME:____, FLIGHT TIME IN TYPE:____, FLIGHT TIME LAST 30 DAYS:____, MONTHS AT UNIT:_____.

B. PILOT NOT AT CONTROLS: __ (See list number 10)__, SEAT POSITION:____(See list number 11)____, DESIGNATION:__(See list number 12)____, TOTAL FLIGHT TIME:____, FLIGHT TIME IN TYPE:____, FLIGHT TIME LAST 30 DAYS:____, MONTHS AT UNIT:_____.

9. AIRCREW INFORMATION.
A. PILOT AT CONTROLS:__(See list number 10)__, SEAT POSITION:____(See list number 11)____, DESIGNATION:__(See list number 12)____, TOTAL FLIGHT TIME:____, FLIGHT TIME IN TYPE:____, FLIGHT TIME LAST 30 DAYS:____, MONTHS AT UNIT:_____.

B. PILOT NOT AT CONTROLS: __ (See list number 10)__, SEAT POSITION:____(See list number 11)____, DESIGNATION:__(See list number 12)____, TOTAL FLIGHT TIME:____, FLIGHT TIME IN TYPE:____, FLIGHT TIME LAST 30 DAYS:____, MONTHS AT UNIT:_____.

9. AIRCREW INFORMATION.
A. PILOT AT CONTROLS:__(See list number 10)__, SEAT POSITION:____(See list number 11)____, DESIGNATION:__(See list number 12)____, TOTAL FLIGHT TIME:____, FLIGHT TIME IN TYPE:____, FLIGHT TIME LAST 30 DAYS:____, MONTHS AT UNIT:_____.

B. PILOT NOT AT CONTROLS: __ (See list number 10)__, SEAT POSITION:____(See list number 11)____, DESIGNATION:__(See list number 12)____, TOTAL FLIGHT TIME:____, FLIGHT TIME IN TYPE:____, FLIGHT TIME LAST 30 DAYS:____, MONTHS AT UNIT:_____.

C. AIRCREW POSITION/DESIGNATION:__(See list number 13)_, **RATING:**_(See list number 14)_, **TOTAL FLIGHT TIME:**___, **FLIGHT TIME IN TYPE:**___, **FLIGHT TIME LAST 30 DAYS:**___, **MONTHS AT UNIT:**_____.

D. AIRCREW POSITION/DESIGNATION:__(See list number 13)_, **RATING:**_(See list number 14)_, **TOTAL FLIGHT TIME:**___, **FLIGHT TIME IN TYPE:**___, **FLIGHT TIME LAST 30 DAYS:**___, **MONTHS AT UNIT:**_____.

(Pilot at the controls is the pilot at the controls at the time of the mishap or during the incident being reported. If flight was single pilot, enter N/A for PILOT NOT AT CONTROLS. For GROUND mishaps, do not list pilot data unless the pilots were in the aircraft at the time of the mishap.)

(Add as many subparagraphs as needed. List aircrew information ONLY if there was an aircrew function involved in the mishap. For GROUND mishaps, list experience information for the aircrew involved in the incident.)

NO NAMES, RANKS OR SSN.

10. NARRATIVE: (Brevity is desired, but provide a clear and complete picture of what happened. Include description of mishap causes, injuries and damages. Describe the sequence of events and circumstances leading to the mishap, what happened immediately after the mishap and any other details or information pertinent to the mishap and not described elsewhere in the message.)

11. MISHAP DAMAGE AND COST.

A. COAST GUARD AIRCRAFT DAMAGE OR COMPONENTS INVOLVED IN MISHAP PARTS:_____, **COST:** _____, **LABOR COST:** _____, **TOTAL COST:** _____.

(List individual parts, components or aircraft damage after PARTS. List total parts cost after COST and labor cost (figured on \$16 per hour) after LABOR. TOTAL cost is the total of PARTS and LABOR. If a more detailed description is necessary or desired, use the NARRATIVE or ADDITIONAL FINDINGS. Round cost to the nearest dollar. Specify new vs. overhaul cost as appropriate.)

B. OTHER COAST GUARD PROPERTY DAMAGE:__(Describe non aviation Coast Guard property damage)___, **COST:** _____.

C. NON COAST GUARD PROPERTY DAMAGE:__(Includes other gov't as well as non gov't damage)_____, **COST:** _____.

D. NUMBER OF INJURIES:___, **FATALITIES:**___, **DAYS LOST:**__(days off work, restricted activity, SIQ, hospitalized, etc.)___. (List number of people injured or killed. Enter 0 if no injuries or fatalities.)

E. TOTAL COST: \$__(Sum of 10A, 10B and 10C)___.

(NOTE: List number of personnel injured. Details of injuries should be described in the narrative. Include rank, crew position, if applicable, and injuries of unit personnel, passengers or others involved. INJURY NUMBERS MUST AGREE WITH NARRATIVE).

****NO NAMES OR SSN****

(NOTE: Aviation mishaps involving personnel injuries must also be reported to the MISREP data base. The CG AVIATRS database does not capture injury data (SSN, name, age, days off, severity, etc.)) This is a function of the MISREP data base system.

12. A. ADDITIONAL INFORMATION: (Text as appropriate. Include relevant information not included elsewhere in the message. Describe any item involved in the mishap that is not found elsewhere or in the narrative. Describe problems or complications caused by equipment (ALSE, Avionics, Rescue, NVG, etc) not operating as advertised. This includes positive as well as negative items.)

B. ENGINE MISHAP DATA:_____(For tracking purposes, list the phrase that best describes what happened to the engine as a result of the mishap). (See list number 15)_____.

13. RECOMMENDATIONS AND CORRECTIVE ACTIONS:____(List recommendations or corrective action taken to prevent future mishaps.

14. NAME, RANK, PHONE NUMBER OF PERSON TO CONTACT REGARDING MISHAP:_____.

15. COMMANDING OFFICER'S ENDORSEMENT/COMMENTS:_____.

(The CO shall review the mishap report to evaluate the circumstances surrounding the mishap and indicate actions or recommends needed to correct the deficiencies and prevent similar mishaps. The CO should comment on cause factors and other aspects of the mishap. Comments should address human factor issues involved in the mishap.)

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PICK LISTS FOR AVIATION MISHAP MESSAGES

List #1 AIRCRAFT OPMODE

AUX	GROUND
HC130	FLIGHT
HH60	FLT-REL
HH65	
HU25	
VC4A	
VC20	

LIST #2 MISHAP CLASS COST (refer to COMDTINST M5100.47 (series) for more information)

CLASS A	Over \$1,000,000 in Coast Guard aircraft damage, aircraft missing, abandoned or not economically repairable. Mishap results in fatalities or permanent total disability.
CLASS B	\$200,000-1,000,000 in Coast Guard aircraft damage, permanent partial disability or more than five people hospitalized.
CLASS C	\$20,000-200,000 in Coast Guard aircraft damage, nonfatal injury or occupational illness resulting in lost time from work beyond the day of the mishap.
CLASS D	Less than \$20,000 damage, nonfatal injury or illness not meeting criteria for Class C mishaps. (includes Near Midair collision, Lessons Learned and other mishaps with significant mishap prevention information.)
CLASS E	Aviation incidents involving engine damage only, regardless of the damage cost. If the damage is not contained or not limited to the engine, the mishap will be reported according to the appropriate mishap Class. Class E mishaps can be Flight, Flight-Related or Ground Class E incidents also include Foreign Object Debris (FOD) Damage Incidents.

List #3 PERIOD OF DAY

DAY	DUSK	
DAWN	NIGHT	N/A

LIST #4 METEOROLOGICAL CONDITIONS

IMC	VMC	N/A
-----	-----	-----

LIST #5 OBSTRUCTIONS TO VISIBILITY

BLOWING SAND	FOG/RAIN	RAIN/SNOW
BLOWING SNOW	HAZE	SEA SPRAY
BROWNOUT	MIST	SMOG
CLEAR	NO MOON	SMOKE
CLOUDS	NONE	SNOW
DUST	N/A	SUN
FOG	RAIN	VOLCANIC ASH
FOG/HAZE	RAIN/HAZE	WHITEOUT

LIST #6 MISSION

AI	COOP	ICE	MDP	OLP	SAR
ALPAT	DEMO	LE	MEP	OPS	TEST/FCF
AMIO	ELT	LOG	MER	PAO	TRNG
ATON	FERRY	M-OPS	MSO	PAX	
CARGO	FISH	MAINT	NVG	PHOTO	

LIST #7 FLIGHT PLAN

IFR	VFR
N/A	SVFR

LIST #8 PHASE

APPROACH	HOT REFUELING	PREFLT
AUTOROTATION	HOVERING	ROTOR ENGAGEMENT
CARGO	INFLIGHT	RS DEPLOYMENT
CLIMBING	INTERCEPTING	RUNUP
DEBARKING/EMBARKING	ITO	SEARCH/PATROL
DESCENDING	JACKING	SHUTDOWN
DROPS	LANDING	SIMULATED EMERGE
DUMPING FUEL	LEVEL FLIGHT	STARTUP
FINAL	LOADING/UNLOADING	STATIC DISPLAY
FORCED LANDING	LOW LEVEL	TAKEOFF
FORMATION FLIGHT	MAINTENANCE	TAXIING
FUELING	ORBITING	TEST/FCF
GO AROUND	OVERFLT/FLYBY	TIED DOWN/PARKED
GROUND HANDLING	OVER/WATER	TOUCH/GO
HFIR	PATTERN	TOWING
HOISTING	POSTFLT	WASH

Several choices may seem redundant, but some may better describe the actually situation at the time of the mishap.

LIST #9 ALTITUDE

AGL	FL	
AWL	MSL	N/A

LIST #10 PILOT IN COMMAND

PIC	NPIC
-----	------

LIST #11 SEAT POSITION

RIGHT	LEFT
-------	------

LIST #12 DESIGNATION

AC	FP
CP	IP
SP (student pilot)	

LIST #13 CREW POSITION/DESIGNATION

AV	AI	BA
DM	FE	FM
FS (flight surgeon)	HQBA	HS (corpsman)
LM	N	R
RS	SSO	

Refer to Chapter 8 of the Air Operations Manual (COMDTINST M3710.1) for information on aircrew designations

LIST #14 RATING

AMT	AVT
AST	

LIST #15 ENGINE

FLAMEOUT	N/A
INFLT FAILURE	OVERHAUL
INFLT SHUTDOWN (w/restart)	REMOVE/REPLACE
INFLT SHUTDOWN (w/o restart)	SEL/3EL
INSPECTION	

Several choices may seem redundant, but some may better describe the actually situation at the time of the mishap.

1. FORMAT FOR VESSEL UNDERWAY OPERATIONAL MISHAP MESSAGE

FM (UNIT NAME)
TO AIG FOUR NINE THREE FOUR (FOR SMALL BOAT OPERATIONAL MISHAPS)
AIG FOUR NINE TWO THREE (FOR CUTTER/CUTTER SMALL BOAT
OPERATIONAL MISHAPS)
COMMANDANT (G-WKS) FOR CLASS A AND B MISHAPS
INFO OPERATIONAL COMMANDER

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**WHAT FOLLOWS MAY CONTAIN PRIVILEGED SAFETY INFORMATION.
USE FOR MISHAP PREVENTION PURPOSES ONLY.**

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SUBJ: CLASS (A, B, C, D OR HIPO), VESSEL OPERATIONAL MISHAP REPORT //
A. SAFETY AND ENVIRONMENTAL HEALTH MANUAL (COMDTINST M5100.47)

MSGID / (FIVE DIGIT OPERATING FACILITY) //

VESSEL TYPE/ (BOAT OR CUTTER TYPE) / (CG ID OR HULL NUMBER) //

DESC/ (PROVIDE SHORT DESCRIPTION OF MISHAP; E.G. LACERATED FOOT) //

OPMODE/ (SEE TABLE 1 BELOW FOR CHOICES) //

DATE/ (MM-DD-YY) //

TIME/ (TTTT) (24 HR. CLOCK) //

LOC/ (LOCATION OF MISHAP, LAT, LONG OR GEOGRAPHIC LOCATION) //

WEATHER/ (WEATHER AT TIME OF MISHAP; OMIT IF NOT A FACTOR) //

MISSION/ (SEE TABLE 2 BELOW FOR CHOICES) //

PHASE/ (PHASE OF OPERATION; SEE TABLE 3 BELOW FOR CHOICES) //

SPEED/ (SPEED IN KNOTS) //

PERS INVOLVED/ (RATE) / (BILLET i.e. COXSWAIN ...INVOLVED IN MISHAP) //

INJURY DATA/ (RATE OF INJURED; OMIT IF NO INJURY) //

RESTRICTED DAYS/ (NUMBER OF DAYS; OMIT IF NO INJURY) //

LOST WORK DAYS/ (NUMBER OF DAYS; OMIT IF NO INJURY) //

NATURE OF INJURY/ (SEE TABLE 4 BELOW FOR CHOICES; OMIT IF NO
INJURY) //

BODY PART/ (SEE TABLE 5 BELOW FOR CHOICES; OMIT IF NO INJURY) //

PROPERTY COST/ (COST PROPERTY DAMAGE IN DOLLARS; OMIT IF NO
DAMAGE) //

OP DAYS LOST/(NUMBER OF OPERATIONAL DAYS LOST; 0 IF NO DAYS LOST)//

NARRATIVE/ (DESCRIBE EVENTS SURROUNDING MISHAP; BE CONCISE) //

CAUSE/ (DESCRIBE MISHAP CAUSAL FACTORS; BE CONCISE) //

ACTION/ (RECOMMENDATIONS AND CORRECTIVE ACTION) //

CO COMMENTS/ CO/OINC ENDORSEMENT & COMMENTS) //

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2. MISHAP MESSAGE TABLES

TABLE 1: OPMODE

AV FLIGHT	Aviation - Flight
AV FLT REL	Aviation – Flight Related
AV GROUND	Aviation - Ground
MARINE AMIO	Alien Migrant Interdiction
MARINE C	Marine Cutter
MARINE CB	Marine – Cutter Boat
MARINE REC	Marine recreational
MARINE REL C	Maine Related Cutter
MARINE REL CB	Marine Related Cutter Boat
MARINE REL SB	Marine Related Small Boat
MARINE SB	Marine Small Boat
MARINE SB41	Marine Small Boat UTB
MARINE SB44	Marine Small Boat 44 MLB
MARINE SB47	Marine Small Boat 47 MLB
MARINE SBRHI	Marine Small Boat RHIB
MOTOR VEH A	Automobile, Van, Pickup
MOTOR VEH B	Pedaled Cycle (Bicycle)
MOTOR VEH M	Motorcycle, Moped
MOTOR VEH P	
MOTOR VEH T	Truck (less than 2 tons)
MOTOR VEH V	All Terrain Vehicle
MOTOR VEH X	Truck over 2 tons (Bus)
PUBLIC	Not at Military Facility or Residence
HOME	Residential
SHORE	

TABLE 2: MISSION

ATON	Aids to Navigation
BA	Bridge Administration
C&S	Command and/or Support
DO	Defense Operations
ELT	Enforcement of Laws and Treaties
IO	Ice Operations
M+R	Maintenance and Repair
MER	Marine Environmental Response
MI	Marine Inspection
ML	Marine Licensing
MSA	Marine Science Activities
PERS	Off Duty/Off the Job
PSS	Port Safety and Security
RA	Radio Navigation Aids
RBS	Recreational Boating Safety
REC	Regional Exam Center
RT	Coast Guard reserve Training/Forces
SAR	Search and Rescue
SRA	Short Range Aids to Navigation
TRG	Training
VDOC	Vessel Documentation
WWM	Waterways Management

TABLE 3: PHASE

ANCHORING	DRYDOCKING	PUMPING	SPORTS/SWIMMING
ASSEMBLING	EMBARKING	PUSHING	SPORTS/TENNIS
BACKING	EXERCISING	REACHING	SPORTS/VOLLEYBALL
CARRYING	FIREFIGHTING	RECLINING	STANDING
CHIPPING	GRINDING	REPAIRING	STANDING/DUTY
CLEANING	HAMMERING	RIDING	TAKING OFF
CLIMBING	HOISTING	RIGGING	TAXIING
CLOSING	INSPECTING	RUNNING	TOWING
COOKING	INSTALLING	SANDBLASTING	TRAINING
CRADLING	JUMPING	SANDING	TRANSPORTING
CROSSING	LANDING	SCRAPPING	TURNING
CUTTING	LEISURE	SHOVELING	UNDERWAY
CUTTING/KNIFE	LIFTING	SITTING	WALKING
DISCHARGE/OPS	LOADING	SPORTS/BASEBALL	WELDING
DISCHARGE/REC	MOORED	SPORTS/BASKETBALL	WORKING/ALOFT
DISCHARGE/TEST	MOWING GRASS	SPORTS/FOOTBALL	WORKING/CONFINED
DISCHARGE/TNG	OPENING	SPORTS/OTHER	
DOCKING	PAINTING	SPORTS/RACQUETBALL	
DRILLING	PARKED	SPORTS/SKIING	
DRIVING/FWD	PULLING	SPORTS/SOCCER	

TABLE 4: NATURE OF INJURY:

ABRASION	BURSITIS	HEATSTROKE	POISONING
AMPUTATION	CONCUSSION	HEMORRHAGE	PUNCTURE
ASBESTOSIS	CUT	HYPOTHERMIA	RASH
ASPHYXIATIO	DERMATITIS	INFECTION	SHOCK/ELEC
BITES	DISLOCATIO	INTOXICATION	SINUSITIS
BLOOD CLOT	ECZEMA	IRRITATION	SPRAIN
BRUISE	FRACTURE	MESOTHELIOMA	STRAIN
BURN/CHEM	FROSTBITE	OXYGEN	STRESS
BURN/ELEC	GUNSHOT	PARALYZE	SYNOVITIS
BURN/HEAT	HEARING	PHARYNGITI	ULCERATION
BURN/RAD	HEAT	PNEUMONIA	WHIPLASH

TABLE 5:BODY PART

ABDOMEN	ELBOW	KNEE	OPTICAL SYSTEM
ANKLE	EYE	LEG	RESPIRATORY
ARM	FINGER	LIVER	RIB
AUDITORY	FOOT	LUNGS	SHOULDER
BACK	GROIN	MOUTH	SKELETAL
BLOOD	HAND	MUSCULAR	SKULL
CHEST	HEAD	NECK	THUMB
CIRCULATORY	HIP	NERVOUS SYSTEM	TOE
DIGESTIVE	JAW	NONE	TOOTH
EAR	KIDNEY	NOSE	WRIST

1. FORMAT FOR VESSEL NON-OPERATIONAL AND SHORE MISHAP MESSAGE

FM (UNIT NAME)
TO COMMANDER, MAINTENANCE & LOGISTICS COMMAND (ATLANTIC OR PACIFIC)
(KSE) in reporting Area
INFO COMMANDANT (G-WKS)
COMMANDER, MAINTENANCE & LOGISTICS COMMAND (ATLANTIC OR PACIFIC)
(KSE) not in reporting Area
OPERATIONAL COMMANDER [FOR CLASS A, B AND C MISHAPS ONLY]
COMMANDANT (G-OCS) for boats, group/station/ANT shore facilities

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**WHAT FOLLOWS MAY CONTAIN PRIVILEGED SAFETY INFORMATION.
USE FOR MISHAP PREVENTION PURPOSES ONLY.**

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SUBJ: CLASS (A, B, C, D OR HIPO), MISHAP REPORT
A. SAFETY AND ENVIRONMENTAL HEALTH MANUAL (COMDTINST M5100.47)
MSGID/ (FIVE DIGIT OPERATING FACILITY) //

UNIT NAME/ //

DESC/ (PROVIDE SHORT DESCRIPTION OF MISHAP; E.G. LACERATED FOOT) //

OPMODE/ (SEE TABLE 1 BELOW FOR CHOICES) //

DATE/ (MM-DD-YY) //

TIME/ (TTTT) (24 HR. CLOCK)//

LOC/ (LOCATION OF MISHAP IN SHOP OR ON VESSEL) //

WEATHER/ (WEATHER AT TIME OF MISHAP; OMIT IF NOT A FACTOR) //

MISSION/ (SEE TABLE 2 BELOW FOR CHOICES) //

PHASE/ (PHASE OF OPERATION; SEE TABLE 3 BELOW FOR CHOICES-USE ALL THAT
APPLY //

SPEED/ (SPEED IN KNOTS/VESSEL IN MPH/MOTOR VEHICLE; OMIT IF NOT A FACTOR) //

PERS INVOLVED/ (RATE / BILLET [E.G. COXSWAIN] ...INVOLVED IN MISHAP) //

INJURY DATA/ (RATE OR GRADE AND SERIES OF INJURED; OMIT IF NO INJURY) //

NAME/ (NAME OF INJURED IF CIVILIAN; OMIT IF MILITARY OR NO INJURY)

RESTRICTED DAYS/ (NUMBER OF DAYS; OMIT IF NONE) //

LOST WORK DAYS/ (NUMBER OF DAYS; OMIT IF NONE) //

HOSPITALIZED DAYS/ (NUMBER OF DAYS; OMIT IF NONE) //

WORKERS COMP FILED/ (YES IF FILED NO IF NOT; OMIT IF MILITARY MEMBER OR
NO INJURY) //

DISABILITY/ (PARTIAL OR TOTAL; OMIT IF NO INJURY OR INJURY NOT DISABLING) //

NATURE OF INJURY/ (SEE TABLE 4 BELOW FOR CHOICES; OMIT IF NO INJURY) //

BODY PART/ (SEE TABLE 5 BELOW FOR CHOICES; OMIT IF NO INJURY) //

PROPERTY COST/ (COST PROPERTY DAMAGE IN DOLLARS; OMIT IF NO DAMAGE) //

OP DAYS LOST/ (NUMBER OF OPERATIONAL DAYS LOST; 0 IF NO DAYS LOST) //

Encl. (9) to COMDTINST M5100.47

NARRATIVE/ (DESCRIBE EVENTS SURROUNDING MISHAP; BE CONCISE) //

CAUSE/ (DESCRIBE MISHAP CAUSAL FACTORS; BE CONCISE) //

ACTION/ (RECOMMENDATIONS AND CORRECTIVE ACTION) //

CO COMMENTS/ (CO/OINC ENDORSEMENT & COMMENTS) //

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2. MISHAP MESSAGE TABLES

TABLE 1: OPMODE

AV FLIGHT	Aviation - Flight
AV FLT REL	Aviation – Flight Related
AV GROUND	Aviation - Ground
MARINE AMIO	Alien Migrant Interdiction
MARINE C	Marine Cutter
MARINE CB	Marine – Cutter Boat
MARINE REC	Marine recreational
MARINE REL C	Maine Related Cutter
MARINE REL CB	Marine Related Cutter Boat
MARINE REL SB	Marine Related Small Boat
MARINE SB	Marine Small Boat
MARINE SB41	Marine Small Boat UTB
MARINE SB44	Marine Small Boat 44 MLB
MARINE SB47	Marine Small Boat 47 MLB
MARINE SBRHI	Marine Small Boat RHIB
MOTOR VEH A	Automobile, Van, Pickup
MOTOR VEH B	Pedaled Cycle (Bicycle)
MOTOR VEH M	Motorcycle, Moped
MOTOR VEH P	Pedestrian
MOTOR VEH T	Truck (less than 2 tons)
MOTOR VEH V	All Terrain Vehicle
MOTOR VEH X	Truck over 2 tons (Bus)
PUBLIC	Not at Military Facility or Residence
HOME	Residential
SHORE	

TABLE 2: MISSION

ATON	Aids to Navigation
BA	Bridge Administration
C&S	Command and/or Support
DO	Defense Operations
ELT	Enforcement of Laws and Treaties
IO	Ice Operations
M+R	Maintenance and Repair
MER	Marine Environmental Response
MI	Marine Inspection
ML	Marine Licensing
MSA	Marine Science Activities
PERS	Off Duty/Off the Job
PSS	Port Safety and Security
RA	Radio Navigation Aids
RBS	Recreational Boating Safety
REC	Regional Exam Center
RT	Coast Guard reserve Training/Forces
SAR	Search and Rescue
SRA	Short Range Aids to Navigation
TRG	Training
VDOC	Vessel Documentation
WWM	Waterways Management

TABLE 3: PHASE

ANCHORING	DRYDOCKING	PUMPING	SPORTS/SWIMMING
ASSEMBLING	EMBARKING	PUSHING	SPORTS/TENNIS
BACKING	EXERCISING	REACHING	SPORTS/VOLLEYBALL
CARRYING	FIREFIGHTING	RECLINING	STANDING
CHIPPING	GRINDING	REPAIRING	STANDING/DUTY
CLEANING	HAMMERING	RIDING	TAKING OFF
CLIMBING	HOISTING	RIGGING	TAXIING
CLOSING	INSPECTING	RUNNING	TOWING
COOKING	INSTALLING	SANDBLASTING	TRAINING
CRADLING	JUMPING	SANDING	TRANSPORTING
CROSSING	LANDING	SCRAPPING	TURNING
CUTTING	LEISURE	SHOVELING	UNDERWAY
CUTTING/KNIFE	LIFTING	SITTING	WALKING
DISCHARGE/OPS	LOADING	SPORTS/BASEBALL	WELDING
DISCHARGE/REC	MOORED	SPORTS/BASKETBALL	WORKING/ALOFT
DISCHARGE/TEST	MOWING GRASS	SPORTS/FOOTBALL	WORKING/CONFINED
DISCHARGE/TNG	OPENING	SPORTS/OTHER	
DOCKING	PAINTING	SPORTS/RACQUETBALL	
DRILLING	PARKED	SPORTS/SKIING	
DRIVING/FWD	PULLING	SPORTS/SOCCER	

TABLE 4: NATURE OF INJURY:

ABRASION	BURSITIS	HEATSTROKE	POISONING
AMPUTATION	CONCUSSION	HEMORRHAGE	PUNCTURE
ASBESTOSIS	CUT	HYPOTHERMIA	RASH
ASPHYXIATIO	DERMATITIS	INFECTION	SHOCK/ELEC
BITES	DISLOCATIO	INTOXICATION	SINUSITIS
BLOOD CLOT	ECZEMA	IRRITATION	SPRAIN
BRUISE	FRACTURE	MESOTHELIOMA	STRAIN
BURN/CHEM	FROSTBITE	OXYGEN	STRESS
BURN/ELEC	GUNSHOT	PARALYZE	SYNOVITIS
BURN/HEAT	HEARING	PHARYNGITI	ULCERATION
BURN/RAD	HEAT	PNEUMONIA	WHIPLASH

TABLE 5:BODY PART

ABDOMEN	ELBOW	KNEE	OPTICAL SYSTEM
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AUDITORY	FOOT	LUNGS	SHOULDER
BACK	GROIN	MOUTH	SKELETAL
BLOOD	HAND	MUSCULAR	SKULL
CHEST	HEAD	NECK	THUMB
CIRCULATORY	HIP	NERVOUS SYSTEM	TOE
DIGESTIVE	JAW	NONE	TOOTH
EAR	KIDNEY	NOSE	WRIST

LIMITATIONS ON THE USE AND DISCLOSURE OF MISHAP INVESTIGATIONS AND REPORTS.

1. Introduction. A thorough understanding of the concept of privileged safety information is essential for the proper investigation of mishaps in the Coast Guard Safety Program. This enclosure discusses the use and restrictions of safety privilege. Personnel involved in either the mishap or legal investigation and the review processes **must** understand and honor the privileged nature of safety information.
2. Mishap Investigations vs. Legal Investigations. There are several reasons for investigating mishaps. Mishap investigations and administrative investigations share a common goal of fact finding. However they serve different purposes within the Coast Guard and must be treated differently. Safety investigations are conducted solely for mishap prevention. Legal investigations are conducted for all other purposes including claims, disciplinary, and administrative actions.
 - a. Mishap investigations are conducted with the goal of prevention, not punishment. Persons involved in mishaps, either directly or indirectly, cannot be disciplined or punished based on the findings of the mishap investigation. A mishap investigation traces the events from a time when things were going normally through the mishap evolution. This sequence of events is then analyzed for all the contributory or causal factors that played a role in the mishap. This process seeks to find out why a mishap occurred so similar mishaps may be prevented.
 - b. Legal investigations of mishaps are conducted to determine possible neglect or malfeasance by government personnel. This type of investigation may take the form of a court of inquiry or other fact-finding body, as specified by the Administrative Investigations Manual, COMDTINST M5830.1 (series). If the legal investigation seeks to place blame for the mishap, witnesses are accorded the right not to testify if such testimony would be self-incriminating.
3. The Safety Privilege Concept. The Commandant has determined that certain Mishap Analysis Reports contain privileged information and shall only be used for safety purposes and only reviewed by personnel who have a direct responsibility for mishap prevention. The concept of privilege is intended to prevent the unnecessary disclosure of privileged safety information outside the safety program. To promote conjecture, speculation and frank discussions by safety investigators, safety investigation boards, endorsers and reviewers of safety investigations, the USCG will not disclose privileged safety information, which is defined in this enclosure.
 - a. Definition of Privileged Information. There are two types of privilege safety information found in mishap reports.
 - (1) The first includes the findings, evaluations, analyses, opinions, conclusions, recommendations and other products of the deliberative processes of a safety investigator, safety investigation boards, endorsers and reviewers.
 - (2) The second includes statements, reports or information given to a safety investigator or board pursuant to a promise of confidentiality,

and any direct references to any such statements or information in a mishap report.

- b. In some mishaps, the actual causal factors may never be discovered unless witnesses are assured that their statements and information will be used for mishap prevention only. Individuals may be reluctant to reveal information pertinent to a mishap because they believe certain uses of the information could be embarrassing or detrimental to themselves, their fellow service members, their command/employer, or others. In addition, Mishap Analysis Board (MAB) members and endorsers might be reluctant to include their deliberations, opinions, and recommendations if they believe the information could be used for other than safety purposes.
4. Grants of Confidentiality. To advance the purpose of mishap prevention, investigation procedures should encourage widest disclosure of all relevant information. Safety investigators may give a promise of confidentiality to encourage frank and open communications to any individual who provides information to the MAB, if it is believed that without an offer of confidentiality, the individual will not provide a candid statement.
- a. These promises must be explicit, in writing or spoken at the beginning of a recorded statement, and cannot be implied from the investigator's status or function.
 - b. The witness will be told that the promise only applies to information provided by the witness for the safety investigation (even if the witness provides the same information to another investigation board). In each instance, the promise of confidentiality will be strictly limited to only the information provided directly by the witness for the safety investigation, after the promise was extended.
 - c. Individuals interviewed by the MAB will not testify under oath. If a witness is granted a promise of confidentiality by the MAB, they should be advised their statement (oral or written) will not be used in any administrative, punitive or legal action without their consent.
 - d. The safety investigator must document all instances in which a witness gives a statement pursuant to a promise of confidentiality. These promises should only be given as needed to ensure forthright cooperation of the witness concerned. See Figure 2-1 in Enclosure (2).
 - e. Promises of confidentiality will be granted individually (on a witness by witness basis) and may not be given automatically or on a blanket basis to all witnesses interviewed.
 - f. A "Witness Statement Promise of Confidentiality Advisory Form" (See enclosure (2)) shall be attached to each witness statement.
 - g. A list of all witness interviewed shall be include in the Mishap Analysis Report annotating whether the individual was offered and accepted the promise of confidentiality.

- h. If evidence of a crime is discovered, the safety investigation must stop and no further offers of confidentiality may be made. Commandant (G-WKS) in consultation with the Office of Chief Council will decide whether the safety investigation should be secondary to the criminal investigation.
 - i. Safety investigators may grant promises of confidentiality in investigations of all aviation mishaps. For mishaps involving military unique items (such as ships, shipboard systems, weapon systems, etc) military unique operations or exercises, Commandant (G-WKS) will determine for each mishap whether investigators may grant confidentiality. For all other mishaps, promises of confidentiality are not authorized.
5. Restrictions/UCMJ Violations. All members of the Coast Guard are prohibited from violating the privileged character of the mishap report in any way, whether by unauthorized access, duplication or retention of copies or original documents or through unauthorized disclosure of any part of the safety investigation report. Distribution of privileged safety information to any person or any command not specified in this instruction or specifically authorized by the Commandant (G-WK) is prohibited. Such violations are punishable under article 92, Uniform Code of Military Justice and may be grounds for disciplinary action under civilian personnel regulations. In accordance with the "privilege statement" concept, the following restrictions shall be observed:
- a. Completed Report. Privileged safety information from a mishap analysis report shall not be appended to any other document, unless the sole purpose of such a document is the prevention of mishaps.
 - b. This prohibition includes reproducing any part of a mishap analysis report or disclosing the contents thereof by means of giving testimony relative to the mishap report.
 - c. Adverse Action. Privileged safety information will not be used to support disciplinary or adverse administrative action, to determine the misconduct or line-of-duty status of any personnel, or as evidence before any evaluation board. Nor shall they be used as evidence before administrative bodies, such as aviator disposition boards or promotion boards.
 - d. Litigation of Claims Involving U.S. Government. Privileged safety information will not be used to determine liability in administrative claims for or against the Government or in any litigation on behalf of the Government.
 - e. The decision to convene a legal investigation of a mishap remains within the discretion of the commander(s) concerned. Such a decision shall not be based on the contents of a mishap investigation analysis report or the Coast Guard Mishap Report. Remarks concerning legal proceedings being conducted shall not be included in a mishap analysis report. The report of the proceedings of a legal investigation shall not be appended to, or made a part of, the mishap investigation analysis report.
6. Administrative Safeguards.
- a. Correspondence. The following notices shall appear before the subject line

for:

- (1) Messages.

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**WHAT FOLLOWS MAY CONTAIN PRIVILEGED SAFETY INFORMATION.
USE FOR MISHAP PREVENTION PURPOSES ONLY.**

- (2) Endorsements.

**WHAT FOLLOWS MAY CONTAIN PRIVILEGED SAFETY INFORMATION.
USE FOR MISHAP PREVENTION PURPOSES ONLY.**

- (3) The following notice shall appear on the MAR immediately after initial heading identifying the mishap.

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**MISHAP ANALYSIS REPORT
FOR OFFICIAL USE ONLY
SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH COMDTINST
M5100.47 (series)**

**WHAT FOLLOWS MAY CONTAIN PRIVILEGED SAFETY
INFORMATION. UNAUTHORIZED DISCLOSURE OF THE
INFORMATION IN THIS REPORT IS PUNISHABLE UNDER ARTICLE 92,
UNIFORM CODE OF MILITARY JUSTICE AND MAY ALSO BE GROUNDS
FOR DISCIPLINARY ACTION UNDER CIVILIAN PERSONNEL
REGULATIONS**

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- (4) The following notice shall appear on the bottom of each page of the MAR.

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**MISHAP ANALYSIS REPORT
FOR OFFICIAL USE ONLY
SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH COMDTINST
M5100.47 (series)**

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- b. Mailing Envelopes/MAR Covers. Envelopes and Mishap Analysis Report Covers should be stamped:

**FOR OFFICIAL USE ONLY
SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH COMDTINST
M5100.47 (series)**

- 7. Security Classification. Mishap analysis reports shall not be classified unless they contain information requiring classification in the interests of national defense or security. Reports containing such information shall, if possible, be prepared with the classified material separate from the report, so that the remainder of the report may remain unclassified.

8. Essential Safety Information. Communication of this type information is necessary to share lessons learned that may prevent reoccurrence of the same or similar type mishap. This information may be mishap specific in nature, such as an equipment design problem, or it may be conceptual in nature, such as a management system problem.
9. Dissemination of Essential Safety Information. Commandant (G-WKS) shall disseminate any essential safety information received from any reports required by this instruction. Minimum distribution shall be to the appropriate resource/aircraft/vessel controlling custodians. In no case should the fact that information is privileged safety information inhibit the dissemination of essential safety information. Should essential safety information include privileged safety information, and that information has not been adequately disseminated to those who need it, Commandant (G-WKS) shall take one of the following actions (listed in the order of preference):
 - a. Extract the essential safety information from the privileged safety information and disseminate only that information (i.e., via articles in safety periodicals, safety advisory messages, newsletters, correspondence recommending corrective action, etc.).
 - b. Expunge (“scrub” or “sanitize”) all identifying data from the privileged safety information which could connect it to a particular individual, organization, or mishap. Circulate the essential safety information via articles, periodicals, case studies, etc.
10. Release of Non-Privileged Mishap Information. All requests for non privilege mishap reports or excerpts outside the authorized distribution shall be referred to Commandant (G-WKS).
 - a. The provisions of the Coast Guard Freedom of Information and Privacy Acts Manual, COMDTINST M5260.3 (series), the Public Affairs Manual, COMDTINST M5728.2 (series) and the Personnel Manual, COMDTINST M1000.6 (series) govern the release of information not contained in the mishap analysis report.
 - b. Restrictions on the release of information contained in mishap analysis reports are contained in this instruction. The provisions of the Administrative Investigations Manual, COMDTINST M5830.1 (series) govern release of information contained in the report of a legal investigation.
11. Release of Privileged Mishap Information. All requests for privileged safety information shall be forwarded to Commandant (G-WKS). Unless specifically authorized by Commandant (G-WKS), these restrictions apply to the release of Coast Guard privileged safety information:
 - a. Individual Knowledge. Any individual having knowledge of the content of MAB reports is prohibited from releasing that information, except per this instruction.
 - b. Information Exchange with Other U. S. Military Services. Exchange of privileged safety information among the military services shall be limited to

the respective safety centers, and controlled to prevent the compromise of privileged information.

- c. News Media. Mishap information based on the Mishap Final Action message may be released. In regard to news release in particular, it is essential to preserve the privileged status of MAB reports. The release of information to the news media is governed by the Coast Guard Freedom of Information and Privacy Acts Manual, COMDTINST M5260.3 (series), the Public Affairs Manual, COMDTINST M5728.2 (series) and the Personnel Manual, COMDTINST M1000.6 (series). Mishap information released to news media during the investigation will not include or show:
 - (1) Mishap responsibility on the part of any person.
 - (2) Failure of equipment or facilities.
 - (3) Statements tending to indicate mishap liability of the government or persons.
 - (4) Classified information.
 - (5) Causal factors.
 - (6) Other privileged safety information
- d. The Congress or Foreign Nationals. Request for information from foreign nationals or the Congress, its committees, or members acting in their official capacity shall be forwarded to Commandant (G-WKS).
- e. Relatives of Persons Involved in Mishaps. Notification to relatives of persons involved in mishaps is governed by the Personnel Manual, COMDTINST M1000.6 (series) or Decedent Affairs Manual, NAVMEDCOM 5360.1 (series). The release shall make no reference to any cause factors of a mishap. Classified information shall not be discussed with, nor given to next of kin or any representatives of the next of kin.
- f. Subpoenas. Subpoenas for mishap information for use in civil/military criminal proceedings, anticipated litigation, or in administrative claims against the government, shall be referred to Commandant (G-L). This also applies to requests for release to the U. S. Department of Justice.
- g. Technical Representative/Contractors. Requests for mishap information from technical representatives, manufacturers, and contractors or their agents shall be forwarded to Commandant (G-WKS) for action. Information requested shall be for safety purposes only regarding product design and/or improvement. Information shall be furnished only by Commandant (G-WKS) with the complete understanding that it will be used ONLY for safety and shall not be further released by the requester.
- h. Training Purposes. Commandant (G-WKS) shall forward selected mishap information to the respective training programs (i.e., ATC Mobile, PCO/PXO School, etc.) for use as training examples.
- i. Other U. S. Government Agencies. Requests shall be forwarded to

Commandant (G-WKS).

- j. All other requests for mishap information, not covered above, shall be referred to Commandant (G-WKS).
12. The Privacy Act of 1974 requires that all information that can be retrieved by an individual's social security number, name, or some other identifying particular assigned to the individual, be furnished or made available to the individual unless the system manager has authorized denial of access to a record. Requests for information maintained in a system of records as defined by the Privacy Act shall be forwarded to Commandant (G-CIM). The Privacy Act specifically prohibits the release or dissemination of information from a mishap record that pertains to an individual, except as authorized in the act. See the Coast Guard Freedom of Information and Privacy Acts Manual, COMDTINST M5260.3 (series). In order to prevent the release of privileged safety information pursuant to a Privacy Act request, it shall not be maintained in a system of records from which it can be retrieved by the name, or any other identifier (such as social security number), of an individual. See the Coast Guard Freedom of Information and Privacy Acts Manual, COMDTINST M5260.3 (series).
13. The Freedom of Information Act (FOIA) requires that all Federal agencies provide the fullest possible disclosure of information to the public and places the burden on the federal agency to justify withholding any requested information. Requests made by clear implication or expressly per the Freedom of Information Act shall be forwarded to Commandant (G-CIM). Privileged safety information shall not be released pursuant to FOIA, as it is exempt from release under the authority of 5 USC 552(b)(5). The deliberative process privilege shall be cited to protect release of the deliberations of board members, experts, and endorsers. The special armed forces safety privilege shall be cited to protect witness statements and information collected under a grant of confidentiality. See the Coast Guard Freedom of Information and Privacy Acts Manual, COMDTINST M5260.3 (series).
14. Privileged Safety Information Restrictions. In accordance with the "privileged statement" concept, the following restrictions shall be observed:
 - a. Witness. A witness in other investigations who was also a witness before a mishap board for the same mishap cannot properly be questioned with respect to their statement to the mishap board. This does not preclude the legal investigation from questioning the same witness in the same area(s).
 - b. Investigation Board Member. A member of the mishap board shall not be assigned as a member of a board conducting a legal investigation for the same mishap and vice versa.
 - c. Member of a Mishap Board as a Witness. Although a member of a mishap board may be called as a witness in the legal investigation of the same mishap, such a procedure should be avoided, if possible. If called however, such a person cannot properly be asked or required to divulge the findings or recommendations of the mishap board. These restrictions apply to any person who may have knowledge of the substance of the report of the mishap board.

15. Privileged Nature of Material. It is essential that the mishap analysis report provide a basis for effective preventive action. Certain portions of the material used in the mishap analysis are obtained under the promise that information will have a privileged status and cannot be used for disciplinary, punitive, promotion, evaluation, attrition, or litigation purposes. Previously, the privileged status applied to each document in the mishap analysis report, causing duplication of effort. For example, the flight plan filed by the pilot prior to a mishap is a Government record and may be used by both the mishap analysis and the legal investigation. Former directives required that the mishap analysis board and fact-finding body make separate copies of the flight plan and similar documents. No good purpose is served by such duplication of effort. Therefore, the mishap board shall initially classify mishap information into two categories: Privileged and Non-privileged. The presidents of the mishap board and the fact-finding body can then determine what non-privilege information they both require and designate one person to obtain this material and make enough copies for both the mishap board and the fact-finding body. This procedure will provide a considerable saving in time and eliminate useless duplication of effort without compromising the effectiveness of the mishap analysis or the status of the privileged material. Any material not clearly within either category should be classified as privileged.

- a. Privileged Material. Privileged material shall be given the special handling required by this paragraph. Privileged material shall include, but is not limited to, the following:
 - (1) All information obtained under the assurance that it will be used solely for mishap prevention.
 - (2) All statements made to the mishap board with a promise of confidentiality.
 - (3) All conclusions, opinions, and recommendations made by the mishap board.
 - (4) All endorsements to the mishap analysis report (except for the Chief of Staff's Final Decision Letter).
 - (5) Photographs captioned or staged by the mishap board where such captions include speculation, opinions or conclusions, if the caption cannot be removed or redacted from the photograph.
 - (6) Videotapes of simulated, computer generated or reenactments of the mishap are always privilege if they are made with input from MAB members or with knowledge of privilege mishap information.
 - (7) Expert opinions and conclusions obtained by the MAB.
 - (8) The actual cockpit voice recordings, but not the transcripts of pertinent information. The actual CVR tape is protected from release to the public based on the privacy interests of the aircrew and or their surviving family members.
- b. Non-Privileged Material. The mishap board and fact-finding body may share

non-privileged material and the work involved in obtaining and duplicating this material. This information may also be released to the public in accordance with the law. In general, non-privileged material consists of real evidence, such as:

- (1) Pieces of wreckage and other recovered items.
- (2) Records: such as flight plans; weather reports and briefings; pilot aircraft and vessel log books; aircraft, vessel, shore facilities, vehicle maintenance records; hoist cam recordings; and weight and balance records.
- (3) Transcripts of tape recordings from control towers, flight service stations, and air traffic control centers radio transmissions.
- (4) Transcripts of relevant portions of cockpit voice recorders (CVR). (However, the actual cockpit voice recordings are privileged and may not be disclosed.)
- (5) Photographs, but not the captions placed on the photograph by the mishap board.
- (6) Videotapes documenting or depicting the mishap scene or wreckage, including flight deck videos and non-official videotapes and films made by individuals.
- (7) Laboratory analyses (factual data, but not opinions, recommendations or conclusions).
- (8) Witness statements made to the safety investigator without the promise of confidentiality.
- (9) Medical records and laboratory tests, but not the Medical Officer's Report or analysis.
- (10) Other factual data.
- (11) The Chief of Staff's Final Decision Letter and the Final Action Message.

DETERMINING THE COST OF PROPERTY DAMAGE.

1. Mishap Property Cost Determinations: The property damage cost of a mishap is the total cost of Coast Guard property damage, and non-Coast Guard property damage resulting from Coast Guard operations. Multiple resources may be damaged or destroyed by a single event, and are therefore reported as a single mishap. Only direct costs are to be used in determining mishap damage costs. Costs for transportation (personnel & property), salvage, temporary additional duty, setting up equipment to facilitate repair, etc., are not direct costs and are not be included in the total mishap cost estimate. The following guidelines are provided for mishap cost determinations:
 - a. Destroyed, Missing, or Abandoned Coast Guard Aircraft, Cutter or Small Boat Cost. Although the acquisition cost is fixed at time of purchase, subsequent modifications may change the resource cost. Structural and engine overhaul costs also change quickly due to the prevailing market cost of labor and parts. Commandant (G-WKS) will coordinate with G-OCA, G-OCU, G-OCS, G-SEA and G-SEN to determine the acquisition and overhaul costs of an aircraft, cutter or small boat.
 - b. Coast Guard Property Damage. Includes the actual cost of parts and direct repair work hours. Parts cost will include the replacement cost of damaged or destroyed parts or the cost to repair damaged parts. Work-hour costs are computed at the standard rate of \$18 per work-hour. Work-hour costs do not include time used in setting up equipment for the actual repair work. Neither is the time used in removing, replacing, and inspecting undamaged parts and components solely to satisfy technical manual inspection requirements. Direct work-hours include:
 - (1) Cumulative work-hours required to remove, repair, and replace damaged equipment.
 - (2) Work-hours required restoring the equipment to serviceable condition, if economically repairable.
 - (3) Work-hours required to remove and replace undamaged components to gain access to damaged assemblies and/or components.
 - (4) Work-hours required removing and replacing a part if the part is not economically repairable.
 - c. Overhaul/Rework Costs. If a repairable item can be economically overhauled, use the overhaul cost vice replacement cost for that particular item. Some large items (e.g., transmissions, engines) have fixed overhaul costs, contact ARSC or Commandant (G-WKS) for these costs. If there is no established overhaul cost, estimate the repair cost as **20%** of the item's replacement cost (current stock system price). Work-hour costs for removal, installation, etc. must be included in the total cost estimate.
 - d. Replacement of Damaged Components. Removing a damaged component and replacing it with a new or used component to decrease cost and the work-

hours required for purposes of mishap classification is prohibited. If a like component is installed so equipment is available for operations, use the best estimated work-hour costs to remove, repair, and replace the damaged component for mishap classification.

- e. Cost of Non-Coast Guard Property. Non-Coast Guard property damage and non-government property damage resulting from Coast Guard operations are reportable. All costs are in current dollars as of the date of the mishap. Use the best estimate of repair or best estimate of replacement cost whichever is lower.

2. Damage NOT Included in Mishap Damage Cost Estimates.

- a. Damage caused by salvage or fire fighting operations. If damage occurs as a result of salvage or fire fighting or in transporting the wreckage, this damage shall be reported in the Coast Guard Salvage Report and the final Mishap Analysis Report.
- b. Expected damage to Coast Guard experimental or prototype systems incurred during authorized testing.
- c. Authorized intentional destruction of Coast Guard equipment and property.

OPTIONAL FORMAT FOR MAB PROGRESS MESSAGE

(Add or delete sections as appropriate)

PRIORITY

FM: (UNIT PLAD)/(MAB//

TO: COMDT COGARD WASHINGTON DC//G-WKS/G-OCA/G-SEA/G-WKH//

INFO: OTHER APPROPRIATE ADDRESSEES

BT

UNCLAS FOUO//N05100// OR//N0375 (FOR AVIATION)//

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WHAT FOLLOWS MAY CONTAIN PRIVILEGED SAFETY INFORMATION.

USE FOR MISHAP PREVENTION PURPOSES ONLY.

//

SUBJ: (UNIT) (MISHAP TYPE AND CLASS) PROGRESS REPORT//

A. COMDTINST M5100.47

B. CONVENING ORDER DTG

1. SITUATION:

A. SUMMARY OF INJURIES

B. STATUS OF SALVAGE OPERATIONS

C. DAMAGE TO COAST GUARD PROPERTY

D. DAMAGE TO NON-COASTGUARD PROPERTY

E. AVAILABILITY OF PERSONNEL/RECORDS/WRECKAGE/TECHNICAL ASSISTANCE

F. OTHER INFORMATION DEEMED APPROPRIATE

2. ACTION TAKEN:

A. TIME BOARD ARRIVED ON SCENE/CONVENED

B. STATUS OF INVESTIGATION AND ANALYSIS

C. OTHER INFORMATION DEEMED APPROPRIATE

3. ASSISTANCE REQUIRED:

A. CLERICAL

B. TECHNICAL

C. OTHER

4. PLANS AND RECOMMENDATIONS:

A. RECOMMENDED CHANGES TO OPERATIONAL PROCEDURES BASED ON ANALYSIS

B. RECOMMENDED TECHNICAL INSPECTION/TRAINING BASED ON ANALYSIS

C. ESTIMATED TIME OF COMPLETION OF THE ANALYSIS

D. OTHER INFORMATION DEEMED APPROPRIATE

BT

NNNN