

SECTION 12
INVESTIGATION AND REPORTING OF CRANE AND RIGGING GEAR ACCIDENTS

12.1 General. In addition to the investigation and reporting requirements of OPNAV Instructions 5102.1 and 5100.23, activities shall investigate and report accidents in accordance with this section. There are two general categories of accidents as defined below. Crane accidents are those that occur during operation of a category 1, 2, 3, or 4 crane. Rigging gear accidents are those that occur when gear covered by section 14 is used by itself in weight handling operation i.e., without category 1 through 4 cranes. Accidents involving the operation of material handling equipment or equipment covered by NAVFAC P-300 are not included.

12.2 Crane Accidents.

For the purpose of this definition, it is assumed there is an "operating envelope" around any crane, and inside the envelope are the following six elements:

- a. The crane.
- b. The operator.
- c. The riggers and crane walker.
- d. The rigging gear between the hook and the load.
- e. The load.
- f. The crane's supporting structure (ground, rail, etc.)

12.2.1 Definition. A crane accident occurs when any one or more of the six elements in the operating envelope fails to perform correctly during operation, including operation during maintenance or testing resulting in the following:

- a. Personnel injury or death. Minor injuries that are inherent in any industrial operation, including strains and repetitive motion related injuries, shall be reported by the normal personnel injury reporting process of the activity in lieu of these requirements.
- b. Material or equipment damage.
- c. Dropped load.
- d. Derailment.
- e. Two-blocking.
- f. Overload.

- g. Collision, including unplanned contact between the load, crane, and/or other objects.

Items c, d, e, f, and g are considered accidents even though no material damage or injury occurs. A component failure (e.g., motor burnout, gear tooth failure, bearing failure) is not considered an accident solely due to material or equipment damage unless the component failure results in damage to other components (e.g., dropped boom, dropped load, roll over, etc.).

12.3 Rigging Gear Accidents. For the purpose of this definition, it is assumed there is an “operating envelope” around any weight handling operation, and inside the envelope are the following:

- a. Rigging gear and miscellaneous equipment covered by section 14.
- b. The user of the gear or equipment.
- c. The load.
- d. The gear or equipment’s supporting structure.
- e. The load’s rigging path.

12.3.1 Definition. A rigging gear accident occurs when any one or more of the five elements in the operating envelope fails to perform correctly during weight handling operations resulting in the following:

- a. Personnel injury or death. Minor injuries that are inherent in any industrial operation, including strains and repetitive motion related injuries, shall be reported by the normal personnel injury reporting process of the activity in lieu of these requirements.
- b. Material or equipment damage that requires the damaged item to be repaired because it can no longer perform its intended function. This does not include superficial damage such as scratched paint, damaged lagging, or normal wear on rigging gear.
- c. Dropped load.
- d. Two-blocking of cranes and powered hoists covered by section 14.
- e. Overload.

Items c, d, and e are considered accidents even though no material damage or injury occurs. A component failure (e.g., motor burnout, gear tooth failure, bearing failure) is not considered an accident solely due to material or equipment damage unless the component failure results in damage to other components (e.g., dropped load, damaged load, etc.).

12.4 Action. Upon having an accident or having seen evidence of damage (suspected accident), the crane team, riggers, equipment users, etc., shall stop all operations and notify immediate supervisor(s). If there is impending danger to the equipment or personnel, place the crane and/or load in a safe position prior to notifying supervision. Ensure the accident scene is secured and undisturbed so as to facilitate the investigation. The supervisor shall review the situation and take any further emergency action, including stopping production work or other operations that could aggravate the situation. The supervisor shall notify management personnel as well as the activity safety office.

12.4.1 Initial Notification. Notify the Navy Crane Center (Code 06) by fax (610) 595-0812, phone (610) 595-0505, or e-mail (accident@ncc.navfac.navy.mil) as soon as practical but not later than 24 hours after an accident involving a fatality, in-patient hospitalization, overturned crane, collapsed boom, or any other major damage to the crane, load, or adjacent property. If notification is by fax or e-mail, provide a point of contact for additional information.

12.4.2 Investigation and Reporting. For each suspected accident, activities shall promptly perform a comprehensive investigation. Activities shall prepare a Crane and Rigging Gear Accident Report, figure 12-1, and forward a copy to the Navy Crane Center (Code 06) within 30 days of the accident. The activity that is responsible for the weight handling operation at the time of the accident shall initiate and submit the accident report. If the crane or rigging gear is owned by another activity, obtain concurrence from the activity that owns the equipment prior to submitting to the Navy Crane Center. Photographs of the accident scene and material/property damage shall be taken, if possible, and attached to the report. The Navy Crane Center will review accident reports and issue crane safety advisories and lessons learned as appropriate. The custodian of the Crane and Rigging Gear Accident Report is the activity that generates the report. Any request for copies of these reports should be directed to the originating activity.

12.5 Other Unplanned Occurrences. Other unplanned occurrences with lessons to be learned that do not fall under the crane and rigging gear accident definitions, including near misses, shall be reported by mail, fax, or e-mail (noted above) within 30 days of the occurrence with appropriate detail and lessons learned to NCC for information.

CRANE AND RIGGING GEAR ACCIDENT REPORT			
Accident Category: <input type="checkbox"/> Crane Accident <input type="checkbox"/> Rigging Gear Accident			
From:		To: Navy Crane Center 10 Industrial Hwy MS 82 Lester, Pa 19113-2090 Fax (610) 595-0812	
UIC:			Report No:
Activity:			Time: hrs
Crane No:	Category:	Accident Date:	
Category of Service: <input type="checkbox"/> SPS <input type="checkbox"/> GPS		Crane Type:	Crane Manufacturer:
Location:		Weather:	
Crane Capacity:		Hook Capacity:	Weight of Load on Hook:
Fatality or Permanent Disability? <input type="checkbox"/> Yes <input type="checkbox"/> No		Material/Property Cost Estimate:	
Reported to NAVSAFECEN? <input type="checkbox"/> Yes <input type="checkbox"/> No			
Accident Type:			
<input type="checkbox"/> Personal Injury <input type="checkbox"/> Overload <input type="checkbox"/> Derail <input type="checkbox"/> Damaged Rigging Gear <input type="checkbox"/> Load Collision <input type="checkbox"/> Two Blocked <input type="checkbox"/> Dropped Load <input type="checkbox"/> Damaged Crane <input type="checkbox"/> Crane Collision <input type="checkbox"/> Damaged Load <input type="checkbox"/> Other Specify _____			
Cause of Accident:			
<input type="checkbox"/> Improper Operation <input type="checkbox"/> Equipment Failure <input type="checkbox"/> Inadequate Visibility <input type="checkbox"/> Improper Rigging <input type="checkbox"/> Switch Alignment <input type="checkbox"/> Inadequate Communication <input type="checkbox"/> Track Condition <input type="checkbox"/> Procedural Failure <input type="checkbox"/> Other Specify _____			
Chargeable to:			
<input type="checkbox"/> Track Walker <input type="checkbox"/> Rigger <input type="checkbox"/> Operator <input type="checkbox"/> Maintenance <input type="checkbox"/> Management/Supervision <input type="checkbox"/> Other Specify _____			
Crane Function:			
<input type="checkbox"/> Travel <input type="checkbox"/> Hoist <input type="checkbox"/> Rotate <input type="checkbox"/> Luffing <input type="checkbox"/> Telescoping <input type="checkbox"/> Other <input type="checkbox"/> N/A			
Is this accident indicative of a recurring problem? <input type="checkbox"/> Yes <input type="checkbox"/> No			
If yes, list Accident Report Nos.: _____			
ATTACH COMPLETE AND CONCISE SITUATION DESCRIPTION AND CORRECTIVE/PREVENTIVE ACTIONS TAKEN AS ENCLOSURE (1). Include probable cause and contributing factors. Assess damages and define responsibility. For equipment malfunction or failure, include specific description of the component and the resulting effect or problem caused by the malfunction or failure. List immediate and long term corrective/preventive actions assigned and respective codes.			
Preparer:		Phone and email	Code
Concurrences:		Code	Date
		Code	Date
Certifying Official (Crane Accidents Only):		Code	Date

FIGURE 12-1 (1 of 2)

CRANE AND RIGGING GEAR ACCIDENT REPORT INSTRUCTIONS

This form is designed for facsimile transmission without a cover page or by Email and, with enclosures and signatures, shall be the official document. Electronic submission will be accepted without signatures but the names of the preparer, concurring personnel, and certifying official (for crane accidents only) must be filled in. The E-mail address is <http://accident@ncc.navfac.navy.mil>.

1. Accident Category: Indicate either crane accident or rigging gear accident.
2. From: The naval activity that is responsible for reporting the accident and UIC number.
3. Activity: The naval activity where the accident took place.
4. Report No.: The activity assigned accident number (e.g., 95-001).
5. Crane No.: The activity assigned crane number (e.g., PC-5), if applicable.
6. Category: Identify category of crane (i.e., 1, 2, 3, or 4), if applicable.
7. Accident Date: The date the accident occurred.
8. Time: The time (24 hour clock) the accident occurred (e.g., 1300).
9. Category of Service: Check the applicable service.
10. Crane Type: The type of crane involved in the accident (e.g., mobile, bridge), if applicable.
11. Crane Manufacturer: The manufacturer of the crane (e.g., Dravo, Grove, P&H), if applicable.
12. Location: The detailed location where the accident took place (e.g., building 213, dry dock 5).
13. Weather: The weather conditions at time of accident (e.g., wind, rain, cold).
14. Crane Capacity: The certified capacity of the crane (e.g., 120,000 pounds), if applicable.
15. Hook Capacity: The capacity of the hook involved in the accident at the maximum radius of the operation, if applicable.
16. Weight of Load on Hook: If applicable, the weight of the load on the hook.
17. Fatality or Permanent Disability?: Check yes or no.
18. Material/Property Cost Estimate: Estimate total cost of damage resulting from the accident.
19. Reported to NAVSAFECEN?: Self-explanatory.
20. Accident Type: Check all that apply.
21. Cause of Accident: Check all that apply.
22. Chargeable to: Check all that apply.
23. Crane Function: Check the function(s) in operation at time of accident. Check all that apply. Check N/A if a rigging gear accident.
24. Is this a recurring problem?: Check yes or no. Identify any other similar accidents.
25. Situation Description/Corrective Actions: Self-explanatory.
26. Preparer: Self-explanatory.
27. Concurrences: Self-explanatory.
28. Certifying Official (Crane Accidents Only): Self-explanatory.

FIGURE 12-1 (2 of 2)