

# PRESERVING COMBAT READINESS



## Private Motor Vehicle (PMV) & Government Motor Vehicle (GMV) MISHAP INVESTIGATION GUIDE

MAY 2018

# SAVING LIVES



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# PURPOSE

**T**he main purpose of an accident investigation is to prevent similar accidents from recurring. Safety professionals and investigators hold the assumptions that accidents are preventable and prevention of future accidents can be done if what happened and why it happened can be determined, and proper recommendations instituted. The main concepts surrounding accident investigations are the identification of unsafe acts (human behavior) and unsafe conditions (physical environment).

The process of investigating accidents is based off of asking the right questions at the right time, continually asking ‘why’ until we reach all the causal factors. Since “critical thinking lives in questions”, incorporating “critical-questioning strategy” and teaching the students to ask probing questions is a very appropriate approach to incorporating critical thinking in this class (Nosich, 2009, p. 32). The students must be able to show, to provide, the reasons for their conclusions and this is accomplished through systematic evaluation of the evidence through the elements and standards of reasoning.

As a Service member/Government employee you may be called upon to investigate a PMV/GMV mishap. This “Go-By Guide” is designed to be an additional resource to help you as the mishap investigator collect the information needed and help identify related causes of the mishap by continuing to ask the “who, what, when, why and how.”

#### References

- \* Knowles, M.S., Holton, E.F., & Swanson, R.A. (2016). *The adult learner: The definitive classic in adult education and human resource development (6th Edition)*. Burlington, MA: Elsevier.
- \* Merriam, S.B., Caffarella, R.S., & Baumgartner, L.M. (2014). *Learning in adulthood: A comprehensive guide*. San Francisco: Jossey-Bass.
- \* Nosich, G.M. (2009). *Learning to think things through: A guide to critical thinking across the curriculum*. Upper Saddle River, NJ: Prentice Hall



# POINTS OF CONTACT

## Naval Safety Center Contacts

Mishap Reporting Line ----- (757) 444-2929

Command Duty Officer ----- (757) 444-3520 x7017

WESS Help Desk ----- (757) 444-3520 x7048

Motor Vehicle Group Ring ----- (757) 444-3520 x7822

OSH Group Ring ----- (757) 444-3520 x7821

Mishap Investigations Group Ring ----- (757) 444-3520 x7890

## CNIC Region Program Director (RPD) for Safety Contacts

| REGION          | CNIC REGION NAME | CONUS - OCONUS | COMM Phone            | DSN Phone    |
|-----------------|------------------|----------------|-----------------------|--------------|
| Europe          | CNREURAFSWA      | OCONUS         | 011 (39) 081.568.2789 | 314.626.2789 |
| Hawaii          | CNRH             | OCONUS         | 808.473.1894          | 315.473.1894 |
| Japan           | CNRJ             | OCONUS         | 011 (81) 46.816.9635  | 315.243.9635 |
| Korea           | CNRK             | OCONUS         | 011.82.505.765.5800   | 315.762.5800 |
| Marianas - Guam | JRM              | OCONUS         | 671.349.2463          | 315.349.2463 |
| Mid-Atlantic    | CNRMA            | CONUS          | 757.322.3116          | 262.3116     |
| Washington DC   | NDW              | CONUS          | 301.227.2319          | 202.300.7105 |
| Northwest       | CNRNW            | CONUS          | 360.315.5430          | 322.5430     |
| Singapore       | SAC              | OCONUS         | 011 (65) 6750-2311    | 315.421.2311 |
| Southeast       | CNRSE            | CONUS          | 904.542.4029          | 942.4029     |
| Southwest       | CNRSW            | CONUS          | 619.532.1350          | 522.1350     |

## Marine Corps Traffic Safety Contacts

| HQMC Safety Division 703.604.4169<br>MCICOM Traffic Safety Manager (703) 604-3640 |              |           |
|---|--------------|-----------|
| MCICOM Region   | COMM Phone   | DSN Phone |
| MCIEAST   | 910.451.5725 | 751.5725  |
| MCIWEST   | 760.763.5070 | 365.5070  |
| MCI National Capital Region   | 703.432.1095 | 278.1095  |
| MCB Hawaii  | 808.257.2472 | 457.2472  |



# REFERENCES

The following references are the basic documents necessary for developing and administering a traffic safety and mishap investigation program are:

- a) DOD INSTRUCTION 6055.04 - DoD Traffic Safety Program (April 2010)
- b) DOD DIRECTIVE 5525.4 - Enforcement of State Traffic Laws on a DOD Installation (Oct 1986)
- c) DOD Manual 4500.36 - Acquisition, Management, and Use of DoD Non-Tactical Vehicles (July 2015)
- d) OPNAVINST 5102.1D/MCO P5102.1B - Navy and Marine Corps Mishap and Safety Investigation Reporting and Record Keeping Manual (Jan 2005)
- e) OPNAVINST 5100.12 - Navy Traffic Safety Program (June 2012)
- f) OPNAVINST 11200.5D - Motor Vehicle Traffic Supervision (May 2006)
- g) OPNAVINST 11210.2 - DOD Transportation Engineering Program (Aug 2003)
- h) NAVFAC P300 - Management of Civil Engineering Support Equipment (Sept 2003)
- i) Manual on Uniform Traffic Control Devices (MUTCD) (2009)
- j) MCO 5100.19F-Marine Corps Traffic Safety Program (Drivesafe) (Nov 2011)





# Top Pitfalls for PMV/GMV Mishap Investigations

Below is advice regarding how to successfully investigate and mishap:

## 1. Having the Right Person Investigate

The person who investigates any mishap needs to be not only knowledgeable and competent to conduct the investigation but above all else be impartial and capable of investigating objectively. You may benefit from adding professionals from outside of the command to assist with your investigation to ensure that the investigation is conducted properly.

Ensure that whoever is conducting the investigation does not have any connection to the mishap or the persons involved in the mishap. This helps eliminate any bias during the process. If the investigation is conducted by the command ensure personal opinions do not get in the way of the case. Also important is to ensure that the investigator assigned does not fall prey to retaliation from senior members/boss or others within the command during the investigation or offer a biased decision based on the outcome of the investigation.

## 2. Timely Response

OPNAVINST 5102.1 requires all commands to notify the Naval Safety Center (NAVSAFECEN) of all on and off duty military Class A mishaps within eight hours of the mishap by telephone or electronic means. However, think through what you want to relay beforehand.

A common mistake is not reporting or beginning the investigation until you find out all the information needed to fill out a Web-Enabled Safety System (WESS) report. Start your investigation immediately. If a delay is unavoidable, make sure you at least notify the duty officer at NAVSAFECEN of the mishap with what limited information you have at the time. Keep in mind you have 30 days to file a final WESS mishap report. Any extension from the 30 day requirement must be approved through your chain of command (COC), endorsing chain (if any), and NAVSAFECEN.

## 3. Properly Documenting All the Information

Most commands up the COC want answers to the mishap right away. It is crucial for the person who conducts the investigation to not be too eager. Use this Go-By Guide as a tool to prepare a valid report with all of the needed information:

- The date, time and location of the mishap;
- The full description of the mishap to include, human and material factors that contributed to it; and recommended actions to correct the problems identified.

## 4. Capture the Right Information

In addition to physical evidence and witness testimony, make sure your investigation draws on key materials like:

- Manuals, maintenance and inspection records of machinery, equipment or tools involved in accident;
- Training and disciplinary records of victims and other workers involved;
- Risk factors associated with involved personnel e.g. alcohol, behavioral health, medical conditions etc.; and
- Reports of previous incidents involving the same machinery, equipment, tools, personnel, operation, work area, etc.



## 5. Interviewing the Right People

Interviews are the greatest source of information for any investigation. Interviewers must be experienced and properly trained, as inexperienced interviewers may act in a combative or uninformed manner that serves no purpose, and can shut down any person that may be able to provide key information. Interview not only the eyewitnesses but the individuals who were not present at the incident but might still have critical information to help you determine its cause, (e.g., co-workers, shipmates, roommates etc.).

Make sure before conducting any interview you review all the circumstances of the case and create a list of pertinent questions you will ask the witness and go over those questions with the witness prior to taking a formal statement.

Above all else take notes, keeping in mind this is a safety investigation not a criminal one.

## 6. Relying on Other Documentation

Law Enforcement and sometimes other government agencies will conduct their own investigation if a mishap is fatal or serious. But they are not doing the safety investigation for you. So while the two investigations should mirror one another, you should not rely solely on evidence provided to you from an outside source to finalize or come to conclusions. It is not unusual for witnesses to provide conflicting information to a JAG/LOD/NCIS investigator based on the purpose of those investigations. Your investigation should focus on safety and not fault to ensure that it accomplishes your own goals, (e.g., identifying and correcting problems to prevent recurrence).



## 7. Common WESS Motor Vehicle Reporting System (MVRS) Mistakes or Missing Information

A survey of our NAVSAFECEN WESS MVRS QA personnel revealed these most common errors:

1. Mishap vehicle information is not complete (e.g., Year/Make/Model – 2013/Ford/F150 Lariat) especially with mishaps involving motorcycles (e.g., 2016/Yamaha/YZF-R1S)
2. Training – document all training not just the most recent, especially with Motorcycle mishaps (e.g., BRC/date completed – ARC/date completed)
3. Narrative – expand on the narrative to tell the complete story
4. Lessons learned, what action has the command taken to reduce the chance of this type of mishap occurring again

## Recommended Training

Department of the Navy (DON) and United States Marine Corps (USMC) personnel who meet course prerequisites are eligible to attend courses listed:

### USN Mishap Investigation Course

**Mishap Investigation Course** - The purpose of this course is to provide full-time SOH personnel, safety officers, and designated activity collateral- duty managers or safety officers at Navy and Marine Corps activities with the training to investigate and report mishaps involving both on- and off-duty personnel.

**Scope** - The course content is based on the OPNAVINST 5102.1 Series and includes: administrative considerations; change and energy-barrier target analysis; definitions; types of mishap investigations; requirements to ensure reporting of all mishaps; mishap investigation training; Safety Investigation Board (SIB) requirement's reporting and recording procedures; Commanding Officer review of lost time mishaps; mishap analysis procedures that apply to Navy mishap investigations; reporting and recordkeeping requirements for recreation, athletics, home, military off- duty, and motor vehicle mishaps.

Prerequisites - Must be in GS-018, -019, -640 (IH Tech), -690, - 803 classification series, Industrial Hygiene Officers, or full-time military safety personnel. Military or civilian collateral duty personnel are eligible but must be designated in writing as the activity SOH manager/safety officer. All personnel must have 12 months from course date remaining in job assignment.

### USMC Current Ground Mishap Investigation Course (GMIC)

**Mishap Investigation Course** - The Ground Mishap Investigation course was developed in 2011 by CMC, Safety Division's. This course is designed to aid Ground Safety Officers (GSO), Ground Safety Managers (GSM), and civilian safety practitioners in closing a skills gap of investigation competencies and techniques. The goal is to enhance risk management strategies through effective mishap analysis, hazard identification, hazard abatement, and increased hazard reporting.

The course provides the educational foundation of DoD-HFACS and the taxonomy's application to the investigation and hazard identification process. This course provides 40 hours of advanced mishap investigation techniques instruction beyond the introductory class offered in the Ground Safety for Marines (GSM) course. This course is the only approved equivalent to the Naval Safety Center's course (CIN# A-493-0078) as it fulfills the requirements set forth in DoDI 6055.07, OPNAVINST 5100.23G, MCO 5100.29B, NAVMC Dir. 5100.8, and OPNAVINST 5102.1D/MCO P5102.1B.

**Scope** - This course incorporates the use of a "real-world" mishap case study that challenges each attendee's critical thinking and problem solving skills in an interactive, small group facilitated, adult learning environment. The primary learning objectives focus on root cause analysis through cause mapping with extensive study and direct application of the DoD Human Factors Analysis and Classification System v7.0 (DoD HFACS 7.0). Other course objectives include protection of safety information, mishap and hazard report (HAZREP) requirements, interviewing techniques, and Safety Investigation Board (SIB) requirements.

Upon completion of this course, each member will have the basic knowledge and skills to effectively investigate events ranging from a near miss to a catastrophic mishap. This course also provides a certification which authorizes personnel to participate as a member of a Navy or Marine Corps SIB.



## Prerequisites:

1. Active Duty: Each attendee should be assigned in writing as the primary or additional duty Safety Manager/Officer (i.e. ASO, GSO, GSM, GSC, CDSO) in accordance with MCO 5100.29B, NAVMC Dir 5100.8, or OPNAVINST 5100.23G.
2. DoD Civilians: Each attendee must be assigned to a position that requires skills to mitigate hazards, prevent mishaps, or advise safety investigators as a subject matter expert. Priority is given to civilians within the SOH Community of Interest (GS series of 0017, 0018, 0019, 0690, and 0803).

## PMV/GMV Investigations

Traffic mishaps can be simple or complex depending on the type of injury with the event. How they occur, who or what caused them, and why they occurred are facts that you as the investigator must determine. Every mishap investigator must know the reporting requirement and guiding instruction for mishap reporting (OPNAVINST 5102.1D) and know how to prepare the proper reports. Obtaining good data, identifying all the causes and analysis of a mishap is an effort directed at defining corrective actions to prevent similar mishap recurrence.

Part of your investigation will include obtaining all the necessary information to determine cause and remedies, obtaining witness and victim information and submitting this information into the Naval reporting system, all in an effort to prevent future similar mishaps. Keep in mind your main goal as the mishap investigator is to arrive at logical and objective conclusions without biases.

During the course of your investigation, you may be required to do a site-visit at the crash scene to collect some of the information. Other available resources or evidence such as the police report or toxicological lab reports may not be readily available, and can be requested or obtained as the investigation continues to move forward. However, that should not preclude the investigation process from continuing.

### What type of motor vehicle mishaps need to be reported?

According to OPNAVINST 5102.1D CH-2 (5 OCT 2010) Chapter 3, and the Mishap Reporting Matrix (figure 5-1). Mishaps have to be reported if they are:

1. Class A, B and C government property damage mishaps. This includes property damage caused by a government evolution, operation or vehicle to other government or non-government property.
2. Any other work-related illness or injury that involves medical treatment beyond first aid, loss of consciousness, and/or days away from work, as well as light duty or limited duty for on/off-duty military personnel, or days of job transfer or restricted work for on-duty civilians.
3. All Government Motor Vehicle (GMV) or Government Vehicle Other (GVO) mishaps resulting in \$5000 or more government vehicle or government property damage, and/or injury/fatality of DoD-personnel; or a mishap caused by a GMV/GVO resulting in \$5000 or more total damage including any private vehicle or private property damage, and/or injuries/fatalities to non-DoD personnel.

### Not considered a motor vehicle mishap:

1. Injuries or fatalities to persons in the act of escaping from or eluding military or civilian custody or arrest.
2. A bicycle crash/accident is not a traffic mishap unless it involves a motor vehicle in motion,
3. Damage to a parked vehicle, it is not a traffic mishap.

4. Any ATV or off road vehicle being operated/driven off-road that is involved in a crash is not considered a motor vehicle mishap.

### **Steps to conducting an effective mishap investigation are:**

1. Report the mishap as required by OPNAV guidance (OPNAVINST 5102.1D).
2. Initiate the investigations and gather evidence as soon as possible after it occurs. This allows you to immediately identify and interview witnesses and examine physical evidence, to understand the chain of events that led to the mishap.
3. Analyze evidence and Identify all the causes of the mishap. Note that there are usually multiple causes.
4. Record your findings to help you prepare for submitting the mishap report.
5. Develop a plan for corrective action to prevent the mishap from happening again. These actions should be specific, constructive, address all causes of the accident, and address each of the causes described in the report.
6. Implement your corrective action plan. It is helpful to set a deadline for implementation of corrective actions and there should be monitoring in place to ensure that they are completed.
7. Follow up to evaluate the effectiveness of the corrective actions taken.
8. Make adjustments as needed to continue to improve.

### **Initial Steps**

The investigator should obtain as much preliminary information as possible concerning the mishap. Proper data on mishaps is needed to influence the traffic safety in a positive manner, not to mention the proper data needed of determining root causes of the mishap. Do not hesitate to reach out to local investigation agencies, or command personnel that may be able to provide the necessary information required to submit a valid report in WESS.

The investigation should provide enough evidence to answer the following questions:

- What?
- Where?
- When?
- Who?
- What with?
- Whom with?
- Why?
- How?

In the case of a fatal mishap you may have to reach out to civilian medical facilities or the medical examiner's office to obtain such information as to what was determined to be the cause of death, and if alcohol or drug use was a factor in the mishap. It is recommended that safety investigators utilize command medical representatives (medical officer/Bn surgeon etc.) to gain access to this type of information.



## Witnesses & Statements

Ask the local enforcement investigating officer if there were any witnesses to the crash, were any statements taken and can you either obtain a copy of the statements or the witnesses' names and contact info to conduct a post-crash interview.

You may have to question or take statements from witnesses or personnel to complete your investigation. Statements should be taken as soon as possible from the time of the mishap. When taking a statement ensure that you separate the parties when questioning them. The attachments in the PMV/GMV Mishap Investigation and Reporting Template should be used. Use the following guidelines when taking statements.

1. Interview witnesses promptly, separately and privately.
2. Put the person at ease, show concern.
3. Explain the purpose of the investigation.
4. Ask the witness to give their version.
5. Avoid any suggestion of blame.
6. Try not to put ideas in their mind.
7. Ask questions to clarify your understanding.
8. Avoid questions that give a yes or no answer.
9. Ensure you document all the information received.

Additionally, contact the mishap victims chain of command to determine who the individual was close to at the command and obtain a statement on the individuals driving habits. They may not have been a witness to this crash but may provide some additional info on the individual behavior behind the wheel.

**Mishap Vehicle Examination:** Ask the local enforcement investigating officer if the vehicle was towed and the name of the tow service and if the vehicle is being held as evidence. Request permission from the investigating agency/officer, to conduct a post-crash inspection of the vehicle. Vehicle damage can sometimes influence the outcome of the mishap, but for the most part are seldom causation factors of the crash. On other hand vehicles and their parts provide a lot of evidence that helps in the investigation and may be able to determine the main cause of the crash. This inspection will include looking at the vehicle's overall condition, understanding it was in a crash – did the vehicle pre-crash appear to be in excellent, good, or poor condition. Does the state require annual vehicle inspections – was the inspection current. Were there any items that may have contributed to the mishap or effected vehicle control? The purpose is to obtain supporting information concerning statements of witnesses. Items that should be particularly checked are; tires, brakes, lights, steering, signals and safety equipment. Some unsafe aspect may be determined to have been a cause of the mishap, such as a bald tire. For example, it is important to know whether a tire blew out as a result of the accident, or whether a tire blowout was a possible contributing factor of the mishap. Police reports include many additional items and could assist in these areas. Contact the local police office to obtain a copy.

**Extent of Injury:** Who was injured: driver, passenger, pedestrian? Obtain the severity of the injuries, location of injury: in terms of injury locations on the person's body. You can obtain this information either from the person or person's involved or it can be found in different forms either filled out by medical personnel at the scene or from the hospital/clinic.

**Additional Resources:** There are several other resources an investigator can research to obtain information that may assist them in their investigation. Some of these resources can also provide answers to mishaps requiring a 72 hour profile. Don't count out some sites like:

**News Sources** - Check local news sources for any info that may have been collected, news teams are on site within minutes sometimes of a crash and can provide supporting video documentation. Legal can help with a FOIA request letter to get the supporting documentation

**Social Media** - Do not underestimate what social media can provide. See if the individual had a Facebook account or any affiliation with a local car or motorcycle club. Was there a twitter account by the individual or any tweets about the crash?

**Court Records** - Court records are public records; most municipal cities have a web site containing these records online for free or a small fee.



## **Completing the Investigation/Endorsement Process**

**Upon notification of a Class A mishap, these investigative procedures shall be followed:**

- Navy and Marine Corps Commanders will notify their Controlling Command (COC) and the Naval Safety Center via telephone or electronic means within eight hours of notification of the mishap. In addition the command shall also enter an initial report into the appropriate module of the WESS within 24 hours of the mishap.
- The Commander, CO or OIC designates Mishap Investigator(s).

**Mishap Investigator(s) shall begin the investigation and conduct interviews in accordance with OPNAVINST 5102.1D/MCO P5102.1B:**

- The enclosed PMV/GMV Mishap Investigation and Reporting Template may be used to assist in the investigation.
- Witnesses or persons of interest may include shipmates, coworkers, family, friends, witnesses to the mishap, and witnesses to the conduct of the individual prior to the mishap.
- Mishap Investigator(s) request reports from local agencies (e.g., the police department, fire and emergency services, and the medical examiner).



### For each mishap investigation:

- Using the enclosed template the investigation should include all causes and corrective actions derived from identified shortfalls in command and Navy programs as well as individual behaviors that may be identified, monitored, and corrected.
- For assistance in completing the investigation, the investigator should contact the Naval Safety Center.

**WESS:** All recordable mishaps shall be reported using WESS. WESS provides the data fields matching the information required in the Safety Investigation Report (SIREP) format, for the applicable mishap types. WESS worksheets are provided on the NAVSAFECEN web site.



### Timeline:

- Initial notification of a Class A mishap must occur within 8 hours.
- SIREP shall be completed within 30 days of the mishap occurrence.
- Endorsements – Endorsements are required for all reports that are the result of a mishap investigated by an SIB.

Other investigations do not require endorsement. If standing up an SIB, refer to ref (a). The endorsers of the mishap are the Echelon III, Echelon II, and Naval Safety Center.

- The first endorsement is due within 14 calendar days of the receipt of the SIREP. All subsequent endorsements must be completed within 14 calendar days from receipt of previous endorsements. The SIREP must be completed and forwarded via the endorsement chain up to the controlling command, with copies being sent to the Naval Safety Center and CMC (SD) for USMC mishaps.
- Endorsers shall review the SIREP and previous endorsements to make a determination on whether they agree or disagree with the causes and recommendations. Comments and rationale regarding concurrence is outlined in OPNAVINST 5102.1D, paragraph 6017.
- Any endorser who finds an investigation incomplete or SIREP inadequate must request the appointing authority to reopen the investigation via naval message.
- If any of the time lines cannot be met, the command that cannot meet the required time line shall request an extension from the controlling command with NAVSAFECEN and the endorsing chain of command as information addressees.
- All organization(s) outside of the administrative control chain of command having corrective actions must be included in the endorsement process.

## **Corrective actions shall be tracked by the Controlling Command:**

- Within 30 days of the Naval Safety Center final endorsement, all corrective actions shall be completed by the appropriate organization(s).
- Commands that cannot complete corrective actions within 30 days shall request an extension from the Controlling Command and copy the endorsement chain via email. A rationale for the extension must be provided.

## **PMV/GMV Mishap Investigation and Reporting Template**

### **Introduction**

This enclosure and the attached pages are intended to be used as a guide to assist you in gathering the required information to submit a motor vehicle mishap. This enclosed is not mandated to be completed but as an investigator you will hopefully find it to be a valuable resource.

### **PMV Mishap Investigation – Level 2 – Post Crash**

Keep in mind at this point in the investigation the crash has already occurred and the report will either still be in the investigative stage waiting on supporting evidence or completed.

Your investigation will consist of collecting supporting documentation; supplementary data follow up statements and finally assist with cause analysis. This requires you to discover more information that may be customarily collected.

### **Collecting Supporting Documentation**

**Crash Report:** Contact the law enforcement agency investigating the crash; obtain the investigation division/unit phone number, the reporting/investigating officer's name and the departments case/report number. Request information on how to obtain the report.

**SF-91:** For GMVs, the NAVFAC 300 states an SF-91 must be completed by the driver and signed by the supervisor.

**Command:** Contact the reporting command and obtain all supporting documentation and the name, email and phone number of the POC for any follow on questions or documentation.

### **Medical Examiners Report**

Ask the local enforcement investigating officer if the body was sent to the state/county morgue – medical examiner's office for autopsy. Request information on how to obtain the report.

### **DMV**

Obtain the individual's state driver's license number from the police report and the issuing state.

Make sure to record date of issue, class of license and any endorsements (exp. Motorcycle, bus, CDL, etc.)

Legal can help with a FOIA request letter to DMV for obtaining a copy of the individual's driver history record.

Some of the definitions following are from the ANSI D16.1-1996 Manual and the MUTCD on the classification of motor vehicle traffic accidents.



When completing the following pages of information when the information is not known or does not apply after you have exhausted all resources, use the codes listed below:

**N/A - Non-Applicable or does not apply**

**UNK - Unknown**

**NR - Not Reported**

**MISHAP COMMAND ORGANIZATIONAL INFORMATION**

Provide the following information regarding the organization.

1. **Reporting Command Name:**

2. **Command UIC**

3. **Unit Chain of Command through Echelon 2 as assigned on the date of the mishap?**

4. **Was unit deployed at time of mishap?**

Yes  No

If yes, where?

5. **Command Safety Officer Name:**

(Last, First, Mi.)

Rank                                      Rate                                      Department

Phone Number                                      DSN                                      Fax

Email

**MISHAP INVESTIGATOR INFORMATION**

Name (Last, First, M.I.)

Rank                      Rate                                      Department

Reporting Command Name

Reporting Command UIC

Phone Number                                      DSN                                      Fax

Email

**WESS**

1. **Was this report entered into WESS?**  Yes  No

## **MISHAP INFORMATION**

1. **Did the mishap occur on a government installation?**  Yes  No

2. **Type of Mishap:**

Automobile  Motorcycle  Scooter  
 Bicyclist  Pedestrian  Other

3. **Did this mishap involve (Check all that apply)**

Fatality:  Yes  No Number:

Injury:  Yes  No Number:

No Injuries or Loss Work Time:  Yes  No

4. **Date of the Mishap:** Month                  Day                  Year

5. **Day of the Week:**                  Time:

6. **Location:** City                  State:                  Zip

7. **Light:**  Dawn  Daylight  Dusk  Night

**Street or Highway Lighted:**  Yes  No

## **GEOGRAPHICAL LOCATION**

*(Be Specific – Name of Street, Road, Highway, Route Number Interstate)*

1. **Closest Intersection:**

Kind of Locality:

Interstate  Divided Highway  Residential  School Zone  
 Business/Industrial  Street  Route  Bridge/Tunnel  
 Parking Lot  Other



**2. Weather:**

- Clear     Cloudy     Fog     Mist     Raining     Hail     Snow  
 Sleetng     Other (e.g. HI - lava, earthquake etc.):

**3. Were any environmental conditions potential causal factors of the mishap?**

- Yes     No

If yes, explain:

**4. Road Surface Type:**

- Asphalt     Gravel     Concrete     Dirt     Other

**5. Surface Condition:**

- Dry     Wet     Muddy     Slippery     Snowy/Icy  
 Oily     Flooded     Other (Explain):  
 Covered in Debris (Describe):

**6. Roadway Alignment:**

- Straight-Level     Curve-Level     Grade-Straight     Grade-Curve  
 Hill     Dip     On/Off Ramp     Other

**7. Roadway Defects:**

- None     Potholes, ruts, bumps     Soft/Low Shoulder  
 Loose Material     Under-Construction     Restricted Width  
 Obstructed     Other

Were any roadway issues potential causal factors in the mishap?     Yes     No

If yes, explain.

**8. Type of Crash / Mishap:**

- Single Vehicle     Multiple Vehicle     Pedestrian

**9. Type of Collision:**

- Rear End     Angle     Head-On     Backed Into  
 Sideswiped     Fixed Object     Train  
 Other

**10. Traffic Control Devices:**

- No Traffic Control     Officer or Flagger     One Way St.  
 Signal Light     Stop Sign     Yield Sign  
 R/R Crossing     Traffic Lanes Marked     No Passing Zone  
 H Lane     Pedestrian Signal     Marked Crosswalk  
 School/Work Zone     Warning Sign (Type)  
 Other

**11. Was the traffic control device working at the time of the mishap?**

- Yes     No

**12. Traffic Conditions:**

- Light  
 Medium  
 Heavy  
 Rush Hour  
 Stopped  
 Construction Zone  
 Alternate Patterns  
 Other

**13. Posted Speed Limit:**

(Be Specific – List in MPH or KPM)

**14. Estimated Vehicle Speed at Time of Mishap:**



**15. Were any traffic issues potential causal factors of the mishap?**

Yes    No   If yes, explain:

## **MOTOR VEHICLE INFORMATION - VEHICLE #**

Provide the following information for all vehicles involved in the mishap and indicate what vehicle they were riding in. Duplicate this section where necessary.

Government Motor Vehicle     Private Motor Vehicle

### 1. **Was the Mishap Vehicle:**

- Owned  
 Rented/Leased  
 Borrowed or Loaned  
 Other (Explain)

### 2. **Did the vehicle have current state tags?** Yes No

State                      Plate                      Expiration: Month                      Year

If no, explain:

### 3. **Did the vehicle have a current state inspection sticker?**

- Yes - State                      Month                      Year  
 No - If no, explain:                       Not State Required

### 4. **Vehicle Manufacture:**

### 5. **Vehicle Body Type:**

Sedan     Truck     SUV     Convertible     Compact     Station Wagon/Van

### 6. **Body Style:**    2-Door    4-Door    Hatchback

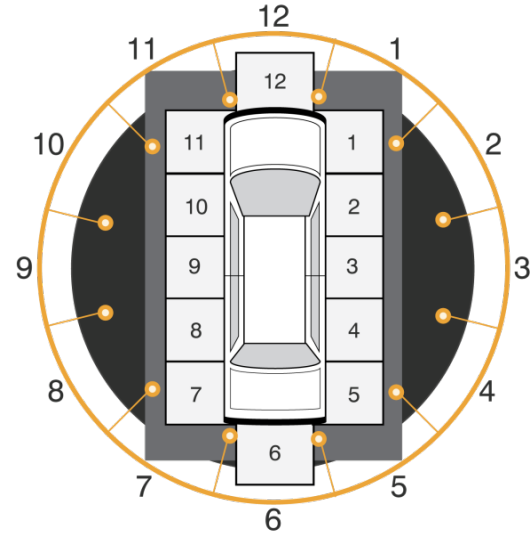
### 7. **Has the vehicle been modified from the manufacture specifications?**

Yes     No

If yes, describe.

**8. Identify the First Point of Impact on the Vehicle.**

- Place an "X" in the portion of the circle that applies.
- Rollover
- Other



**9. Safety Equipment Installed on Vehicle:**

- Lap Belt     Lap-Shoulder Belt
- Airbags     Side Air Bags
- Anti-lock Brakes

**10. Did all the safety equipment perform as expected?**

- Yes     No

If no, explain reason for failure: (if known)

**11. Did any mechanical failures appear to have contributed to the mishap?**

- Yes     No

If yes, explain: (examples include bald tires, brake failure, blowout etc.)

**VEHICLE MANEUVER**

**Vehicle #**

- Going straight ahead
- Backing
- Stopped
- Making a turn:     Right     Left     U-Turn
- Ran off road:     Right     Left
- Other

**Driver/Operator's Actions:**

- None
- Exceeded Posted Speed Limit
- Passing
- Did not have Right-of-Way



- Following too Close
- Wrong Side of the Road
- Improper Turn
- Lane Splitting
- Lost Control
- Avoiding Other Vehicle
- Hit-and-run
- DUI
- Driver Inattention (Explain)
- Other

**MOTORCYCLE INFORMATION**

- Government Motor Vehicle     Private Motor Vehicle

1. **Was the Mishap Motorcycle:**     Owned     Rented/Leased  
 Borrowed or Loaned     Other (Explain)

2. **Did the vehicle have current state tags?**     Yes     No

State                      Plate

Expiration: Month                      Year

If no, explain:

3. **Did the vehicle have a current state inspection sticker?**

Yes - State                      Month                      Year

No - If no, explain:

4. **Motorcycle Manufacture**

- Honda     Yamaha     Suzuki     Harley Davidson     Kawasaki  
 Ducati     BMW     Can-Am     Other

5. **Model (e.g. CB500R, RoadKing, etc.):**

6. How Many Wheels:  2  3

7. Did the motorcycle have a sidecar attached:  Yes  No

8. Type of Motorcycle Classification:  Sport  Non-Sport

9. Has the vehicle been modified from the manufacturer specifications?

Yes  No

If yes, describe:

10. Identify the first point of impact on the vehicle.

Place an "X" in the portion of the circle that applies

Other

11. Safety equipment installed on vehicle:

Anti-lock Brakes  Other

Explain:

12. Did all the safety equipment perform as expected?

Yes  No

If no, explain reason for failure: (if known)

13. Did any mechanical failures appear to have contributed to the mishap?

Yes  No

If yes, explain: (examples include bald tires, brake failure, blowout etc.)

14. List Motorcycle Safety Courses Completed

Course Name:

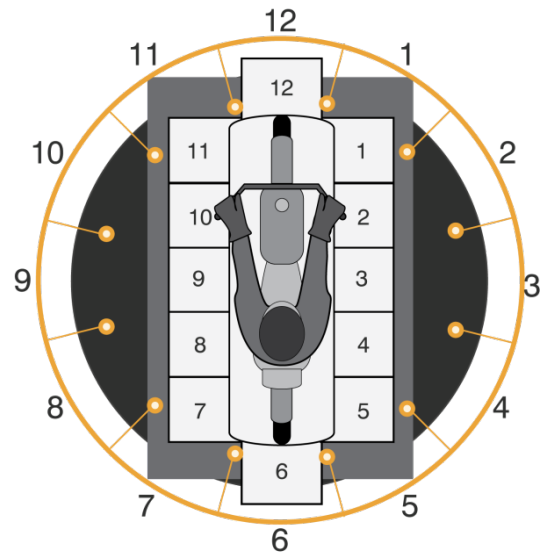
Date Completed:

Course Name:

Date Completed:

Course Name:

Date Completed:



15. Was the motorcycle involved in the mishap the same motorcycle the individual used during safety courses?  Yes  No

16. When did the motorcyclist purchase the motorcycle involved in the mishap?  
Month/Year

### **VEHICLE MANEUVER**

#### **Vehicle #**

- Going Straight Ahead
- Backing
- Stopped
- Making a Turn:  Right  Left  U-Turn
- Ran Off Road:  Right  Left
- Other

#### **Driver/Operator's Actions**

- None
- Exceeded Posted Speed Limit
- Passing
- Did Not Have Right-of-Way
- Following too Close
- Wrong Side of the Road
- Improper Turn
- Lane Splitting
- Lost Control
- Avoiding Other Vehicle
- Hit-and-Run
- DUI
- Driver Inattention (Explain)
- Other



## **PEDESTRIAN**

1. **Is person active duty military or a reservist in a duty status?**

Yes  No

2. **Name (Last, First, Mi.)**

DOD CAC Number:                      Date of Birth:                      Sex:

Branch of Service:                      Duty Status:

If on Leave/Liberty, Provide Dates:

Pay Grade:                      Rating:                      Job Title:

NEC/Designator:                      UIC:

Parent Command:                      *(If Different From Reporting Command)*

Was individual a Geographical Bachelor?  Yes  No

Was individual deployed at time of mishap?  Yes  No  N/A

If yes, for how long?

If not deployed at time of mishap, was individual scheduled to be deployed?

Yes  No

If yes, where and for how long?

3. **Pedestrian Actions:**

- |  |   |
|--|---|
| <input type="checkbox"/> Crossing                | <input type="checkbox"/> In crosswalk           |
| <input type="checkbox"/> Not in crosswalk        | <input type="checkbox"/> At intersection        |
| <input type="checkbox"/> Not at intersection     | <input type="checkbox"/> Walking in the roadway |
| <input type="checkbox"/> Walking off the roadway | <input type="checkbox"/> Standing in the road   |
| <input type="checkbox"/> Lying in the road       | <input type="checkbox"/> Other                  |

**MISHAP PERSONNEL**

Provide the following information for all individuals involved in the mishap. Duplicate this section as necessary for each individual.

**Operator/Driver (Vehicle #1)**

1. **Is person active duty military or a reservist in a duty status?**

Yes  No

2. **Name (Last, First, Mi.)**

DOD CAC Number:                      Date of Birth:                      Sex:

Branch of Service:                      Duty Status:

State License Number:                      State:

If on Leave/Liberty, Provide Dates:

Pay Grade:                      Rating:                      Job Title:

NEC/Designator:                      UIC:

Parent Command:                      *(If different from Reporting Command)*

3. **License Status:**

Not Licensed     Suspended/Revoked     Learners Permit     Valid

4. **Valid License Class: (Check All That Apply)**

Passenger Vehicle     Motorcycle     CDL     Bus     Other

5. **Operator's Driving Experience:**                      Years                      Months

Describe how this information was obtained.

6. **Was Individual a Geographical Bachelor?**

Yes  No

7. **Was Individual deployed at time of mishap?**

Yes  No  N/A

If yes, for how long?

**8. If not deployed at time of mishap, was Individual scheduled to be deployed?**

Yes  No

If yes, where and for how long?

**MISHAP PERSONNEL**

Provide the following information for all individuals involved in the mishap. Duplicate this section as necessary for each individual.

**Operator/Driver (Vehicle #2)**

**1. Is person active duty military or a reservist in a duty status?**

Yes  No

**2. Name (Last, First, Mi.)**

DOD CAC Number:                      Date of Birth:                      Sex:

Branch of Service:                      Duty Status:

State License Number:                      State:

If on Leave/Liberty, Provide Dates:

Pay Grade:                      Rating:                      Job Title:

NEC/Designator:                      UIC:

Parent Command:                      *(If different from Reporting Command)*

**3. License Status:**

Not Licensed     Suspended/Revoked     Learners Permit     Valid

**4. Valid License Class: (Check All That Apply)  Passenger Vehicle**

Motorcycle     CDL     Bus     Other

**5. Operator's Driving Experience:**                      Years                      Months

Describe how this information was obtained:



6. **Was Individual a Geographical Bachelor?**  Yes  No

7. **Was Individual deployed at time of mishap?**  Yes  No  N/A

If yes, for how long?

8. **If not deployed at time of mishap, was Individual scheduled to be deployed?**

Yes  No

If yes, where and for how long?

**PASSENGER – VEHICLE #**

1. **Is person Active Duty Military or a Reservist in a duty status?**

Yes  No

2. **Name (Last, First, Mi.)**

DOD CAC Number:                      Date of Birth:                      Sex:

Branch of Service:                      Duty Status:

If on Leave/Liberty, Provide Dates:

Pay Grade:                      Rating:                      Job Title:

NEC/Designator:                      UIC:

Parent Command:                      *(If Different From Reporting Command)*

Was individual a geographical bachelor?                       Yes                       No

Was individual deployed at time of mishap?                       Yes                       No                       N/A

If yes, for how long?

If not deployed at time of mishap, was Individual scheduled to be deployed?

Yes                       No

If yes, where and for how long?

## **MISHAP INJURIES**

Provide the following information for all individuals involved in the mishap and indicate what vehicle they were riding in. Duplicate this section as necessary for each individual.

### **1. Which Vehicle Occupied:**

- Vehicle #1
- Vehicle #2
- Bicyclist
- Pedestrian
- Other

Injury Type:

- No Injuries
- Deceased at scene or dead before report made
- Permanent/Partial Disability
- Transported from scene for treatment

Hospitalized  Yes  No

Hospital Location                      Status:

Hospitalization start date                      End date

Loss work time away from work  Yes  No

Start date                      End date

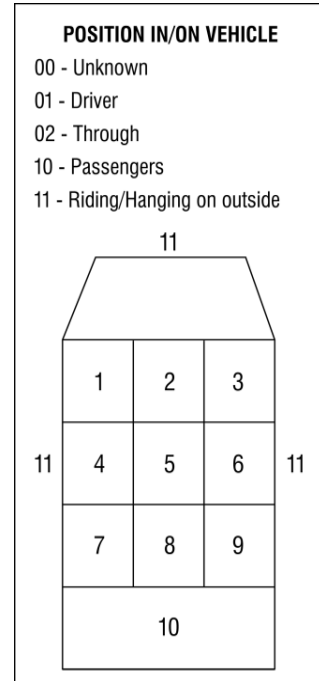
Light/Limited/Restricted Duty  Yes  No

Start date                      End date

### **2. Describe injuries sustained. (be specific)**

**3. Position In/On Vehicle:** (For Motorcycle Operator and Passenger Choose 2 & 5)

- Place an "X" in the box or shade in the position
- Other



**MISHAP INJURIES**

Provide the following information for all individuals involved in the mishap and indicate what vehicle they were riding in. Duplicate this section as necessary for each individual.

**1. Which Vehicle Occupied:**

- Vehicle #1
- Vehicle #2
- Bicyclist
- Pedestrian
- Other

**Injury Type:**

- No Injuries
- Deceased at Scene or Dead Before Report Made
- Permanent/Partial Disability
- Transported from Scene for Treatment  Yes  No



Hospitalized  Yes  No

Hospital Location: \_\_\_\_\_ Status: \_\_\_\_\_

Hospitalization start date \_\_\_\_\_ End date \_\_\_\_\_

Loss work time away from work  Yes  No

Start Date \_\_\_\_\_ End Date \_\_\_\_\_

Light/Limited/Restricted Duty  Yes  No

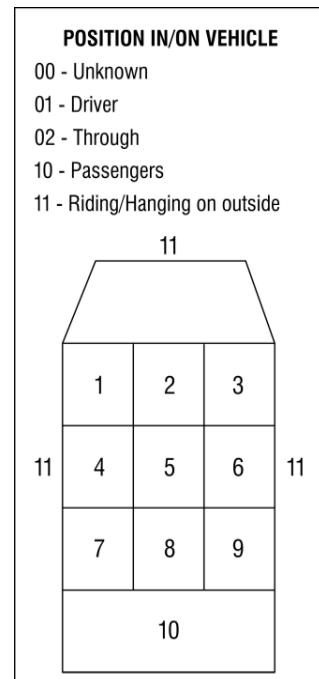
Start date \_\_\_\_\_ End date \_\_\_\_\_

**2. Describe injuries sustained (be specific)**

**3. Position In/On Vehicle:** (For Motorcycle Operator and Passenger choose 2 & 5)

Place an "X" in the box or shade in the position

Other



## **PERSONAL PROTECTIVE EQUIPMENT (PPE)**

### **Driver/Operator – Vehicle #1**

1. **Was the Driver/Operator wearing a seatbelt?**  Yes  No  
Was it properly worn?  Yes  No  
Did it function properly?  Yes  No
  
2. **If equipped with airbag(s), did they deploy?**  Yes  No
  
3. **Was there a passenger?**  Yes  No
  
4. **Was the passenger wearing a seatbelt?**  Yes  No  
Was it properly worn?  Yes  No  
Did it function properly?  Yes  No
  
6. **Did the passenger side airbag(s), deploy?**  Yes  No

### **Driver/Operator – Vehicle #2**

1. **Was the Driver/Operator wearing a seatbelt?**  Yes  No  
Was it properly worn?  Yes  No  
Did it function properly?  Yes  No
  
2. **If equipped with airbag(s), did they deploy?**  Yes  No
  
3. **Was there a passenger?**  Yes  No
  
4. **Was the passenger wearing a seatbelt?**  Yes  No  
Was it properly worn?  Yes  No  
Did it function properly?  Yes  No

5. Did the passenger side airbag(s), deploy?  Yes  No

**MOTORCYCLIST PPE (OPERATOR)**

1. Was the operator wearing a helmet?  Yes  No

If yes, indicate type:  Full Face  3/4 Face  1/2 Helmet  Novelty

If a full face helmet was the visor?  Clear  Tinted  Unknown

2. Was it an approved helmet? (Check approval authority)

DOT (FMVSS 218)

Snell

British Standards Institute

European EU Standard C2204

3. Check other PPE Worn:

Long-Legged Pants

Jacket

Long-Sleeved Shirt

Full Fingered Gloves/Mittens

Reflective Vest

Brightly Colored Outer Upper Garment

Above-Ankle Sturdy Footwear

Impact Resistant Eye Protection (Not Sunglasses)

4. Was there any violation of PPE requirements IAW OPNAVINST 5100.12?

Explain:

5. Was there a passenger?  Yes  No

## **MOTORCYCLIST PPE (PASSENGER)**

6. **Was the passenger wearing a helmet?**  Yes  No

If yes, indicate type:  Full Face  3/4 Face  1/2 Helmet  Novelty

7. **Was it an approved helmet? (Check approval authority)**

- DOT (FMVSS 218)
- Snell
- British Standards Institute
- European EU Standard C2204

8. **Check other PPE worn:**

- Long-Legged Pants
- Jacket
- Long-Sleeved Shirt
- Full Fingered Gloves/Mittens
- Reflective Vest
- Brightly Colored Outer Upper Garment
- Above-Ankle Sturdy Footwear
- Impact Resistant Eye Protection (Not Sunglasses)

9. **Was there any violation of PPE requirements IAW OPNAVINST 5100.12?**

Explain:



**PERSONNEL PROFILE**

Provide the following information for all military individuals involved in the mishap and indicate what vehicle they were riding in. Duplicate this section for each individual.

- Driver/Operator    Vehicle #
- Passenger

**1. What was the driving history of the vehicle operator (If available from DMV)?**

**2. Was individual on a special liberty/leave program as determined by the command?**     Yes     No

**3. Did the individual abide by the program requirements?**     Yes     No

**4. Did the individual have a UCMJ violation or reprimand?**

- Unknown     Yes     No

Other Type of Reprimand:

If yes, provide dates.

Describe the violation.

Describe punishment, if any.

**5. Did individual have previous alcohol incidents?**

- Unknown     Yes     No    If yes, how many?

Describe:

**6. Has individual previously been convicted of a DUI?**

- Unknown     Yes     No

**7. Has individual been to command DAPA?**

- Unknown     Yes     No

**8. Has Individual attended or been scheduled to attend SARP?**

Unknown  Yes  No

If yes, when and where?

**9. Did the individual enter military service under a waiver?**  Yes  No

If yes, how many and what type?

**10. Did the individual have a mentor?**  Yes  No

If yes, was the mentor assigned by the command?  Yes  No

**11. When did the Individual last meet with mentor and what was discussed?**

**12. Has the Individual received documented training on operational risk management?**  Yes  No

If yes, provide date:

Training Venue:

MNP (My Navy Portal)  ORM 101  Command INDOC  Other

**13. Recent Significant Events:**

- Marriage
- Divorce
- Birth of Child
- Death of Relative
- Work Evaluation
- Financial Stress
- Other

## **72 - HOUR PROFILE**

Provide, to the extent possible, the chronological actions and activities of the individual(s) during the 72 hours prior to the mishap.

### **FATIGUE**

1. **Hours of continuous wakefulness prior to mishap:**  Unknown

2. **Hours of continuous duty prior to mishap:**  Unknown

3. **Hours between last meal and mishap:**  Unknown

4. **Hours slept in the last:**

24 Hrs.      48 Hrs.      72 Hrs.       Unknown

5. **Hours worked in the last:**

24 Hrs.      48 Hrs.      72 Hrs.       Unknown

6. **Amount of time traveled (Hours):**  Unknown

7. **Distance driven (Miles):**  Unknown

8. **Based on above circumstances, could fatigue be a factor?**

Yes     No     Unknown

### **ALCOHOL OR DRUGS**

1. **Was alcohol used in the past 24 Hours?**  Yes     No     Unknown

If available, provide the Blood Alcohol Content (BAC) for each individual involved in the mishap.

**2. Location Where Alcohol Was Consumed:**

- Barracks On-Base
- Party Off-Base
- Party On-Base
- Bar Off-Base
- Bar On-Base
- MWR Facility
- Other

**3. Were drugs (legal or illicit) being used?**  Yes  No  Unknown

If yes, provide drug brand name and type:

**PSYCHOLOGICAL STATE**

**Describe the Individual's Mental, Emotional, and Physical State, Including Perceived Stress and Behavior Changes:**

**OTHER**

**Describe Other Factors Prior to the Mishap that Could Have Affected the Mishap Occurrence or Its Outcome:**

**TRIP**

**1. Purpose of the trip:**

- On Leave/Liberty
- Commuting To/From Work
- Other



## **HFACS**

Based on the information collected, check all suspected causal factors that apply to this mishap. Causes may be applied to each piece of equipment or person involved in the mishap. (NOTE: The following HFACS codes are currently being used in the Motor Vehicle Reporting System (MVRS) and were specifically designed for motor vehicle events. They are not HFACS 7.0.)

1. **SKILL BASED ERROR** - Occurring during highly automated tasks, often without thought; vulnerable to attention, memory, and technique failures.

- 1ATT Attention failure
- 1ATT01 Forgot to check blind spot
- 1ATT02 Forgot to use communication device (e.g. horn or turn signal)
- 1ATT03 Didn't keep eyes on the road
- 1ATT04 Inadvertent operation of wrong control (e.g. pressed gas instead of brake or put vehicle into reverse instead of drive)
- 1ATT05 Inadvertently drifted out of lane (note: not due to falling asleep)
- 1LCU Lost control for an unknown reason
- 1LCU01 Lost control for an unknown reason (no further breakdown)
- 1POS Postural error
- 1POS01 Operated vehicle from an awkward position/posture
- 1SO Other skill based error
- 1SO01 Other skill based error (no further breakdown)
- 1TM Timing error
- 1TM01 Reacted too slowly
- 1TM02 Reacted too quickly
- 1TQ Technique error
- 1TQ01 Improper passing maneuver (e.g. passed without looking at the road situation - enough room, vehicle approaching, etc.)
- 1TQ02 Improper application of acceleration or brakes
- 1TQ03 Usual method of executing procedure is flawed/improper/imperfect
- 1TQ04 Failed to maintain a sufficient following distance (due to speed and/or distance between vehicles; not due to misjudgment of distance or speed)
- 1TQ05 Over-steered/overcorrected when avoiding collision
- 1TQ06 Over-steered/overcorrected when attempting to regain position on roadway
- 1TQ07 Failed to negotiate curve/turn/bend/ramp
- 1TQ08 Failed to negotiate lane change/passing maneuver

2. **DECISION ERROR** - Chosen action is inadequate or inappropriate for the situation (honest mistake, poor choice; often due to inadequate knowledge)

- 2DPMV      Vehicular
- 2DPMV01    Inadvertently exceeded capabilities of PMV/GMV
- 2DPMV02    Inadequate loading/securing of items within PMV/GMV
- 2DPMV03    Improper loading/securing of items on top of PMV/GMV
- 2DPMV04    Poor maintenance of PMV/GMV (E.g. failure to change oil regularly)
- 2DPMV05    Inadvertently used defective/inadequate PMV/GMV
- 2DPRO      Procedural decision error
- 2DPRO01    Failed to give way/yield
- 2DPRO02    Inappropriate behavior/maneuver
- 2DPRO03    Improper passing or lane change (without adequate passing room, within a turn, in the oncoming traffic lane, etc.)
- 2IP         Information processing
- 2IP01      Misinterpreted information
- 2PLA        Planning
- 2PLA01     Poor travel planning (e.g. starting a long trip at 2 a.m. or after being awake for a long period of time)
- 2PLA02     Selected a poor or unfamiliar route for travel (e.g. selected a route that was shorter, faster, etc.)
- 2PRI        Prioritization
- 2PRI01     Misplaced prioritization (e.g. swerved into traffic to avoid a small animal)
- 2PRI02     Ignored caution or recommendation (e.g. from a friend)
- 2PRI03     Wrong response to abnormal situation
- 2SA        Situational assessment
- 2SA01     Failed to recognize hazardous conditions
- 2SA02     Failed to modify behavior to protect against potentially hazardous conditions (e.g. decide to press on when tired)
- 2DO        Other decision error
- 2DO01     Other decision error (no further breakdown)

3. **PERCEPTUAL ERROR** - Degraded or unusual sensory input leads to an error

- 3PE01      Misjudged distance
- 3PE02      Misjudged speed
- 3PE03      Misjudged depth

- 3PE04 Misjudged height
- 3PE05 Misjudged surface conditions
- 3PE06 Missed information due to degraded sensory input (e.g. sensory information led to misreading a sign or equipment)
- 3PE07 Misheard traffic cue (e.g. horn) due to noise issues/degradation
- 3PEO Other perceptual error
- 3PEO01 Other perceptual error (no further breakdown)

4. **VIOLATION** - Conscious decision to bend or break existing rules / regulations

- 4VDD Drunk-driving, bac  $\geq$  .08%
- 4VDD01 Drunk-driving, bac  $\geq$  .08% (no further breakdown)
- 4VKNO Knowledge violation
- 4VKNO01 Operated PMV without a valid license/endorsement
- 4VKNO02 Entry into unauthorized areas
- 4VO Other violation
- 4VO01 Other violation (no further breakdown)
- 4VPRO Procedural violation
- 4VPRO01 Illegal but unknown speed
- 4VPRO02 Speeding 10-19 mph over the speed limit
- 4VPRO03 Speeding 20-29 mph over the speed limit
- 4VPRO04 Speeding 30-39 mph over the speed limit
- 4VPRO05 Speeding 40+ mph over the speed limit
- 4VPRO06 Illegal passing or lane changing behavior
- 4VPRO07 Reckless/erratic operation of PMV
- 4VPRO08 Racing with another vehicle
- 4VPRO09 Excessive risk taking
- 4VPRO10 Violation of training rules/laws
- 4VPRO11 Disregard of traffic signals

5. **OUTSIDE INFLUENCE** - Cause completely outside the control of vehicle operator; often due to other drivers / riders not following safe road procedures

- 5OI01 Civilian PMV turned onto or entered roadway on which military PMV traveling
- 5OI02 Civilian PMV changed lanes or merged while traveling the same direction on roadway
- 5OI03 Civilian PMV turned off or exited roadway on which military PMV traveling

- 5OI04 Civilian PMV failed to yield at intersection
- 5OI05 Civilian PMV traveled in wrong direction/opposite direction of traffic;  
military PMV struck head-on by civilian PMV
- 5OI06 Rear-ended by civilian PMV
- 5OI07 Civilian PMV performed a U-turn in path of travel
- 5OI08 Civilian PMV operator intoxicated
- 5OIO Other outside influence
- 5OIO01 Other outside influence (no further breakdown)



2. Was the SVM driving “To” or “From” their destination?  Yes  No

3. Distance Between Point of Origin and Final Destination: Miles

4. Distance Between Origin and Mishap Location:

5. Does the command have a Leave/Liberty Travel Policy that sets maximum driving distance and time for travel?

Yes  No

If yes, describe policy:

### TRAVEL RISK PLANNING SYSTEM (TRIPS)

1. Is the command familiar with the maximum driving time for PMVs, IAW OPNAVINST 5100.12?  Yes  No

2. Does the command require the use of the Travel Risk Planning System (TRIPS)?  Yes  No

3. If yes, did the SVM complete a Risk Assessment?  Yes  No

4. Did the supervisor review and approve the Risk Assessment?  Yes  No

5. Did the SVM follow the approved Travel Plan?  Yes  No

### **Narrative**

Based on the investigation, describe the sequence of events, details, and all contributing and causal factors leading up to and through the mishap.

### **Analysis of Findings/Root Cause Identification**

Using the above causal factors, continue to question the reasons behind their occurrence in order to determine the root causes of the mishap. Describe the root causes in terms of human factors, supervisory actions, and organizational influences. Provide a rationale for each root cause identified.

# GLOSSARY OF TERMS

**Alley** - For the purposes of traffic accident reporting, alleys are treated like any other roadway.

**Animal Drawn Vehicle** - Any vehicle powered or drawn by an animal. This would include horse drawn buggy, horse drawn stagecoach, ox drawn wagon, etc.

**All-Terrain Vehicle (ATV)** - Any self-propelled vehicle with three or four wheels designed for off-highway use, with low-pressure tires, a wheelbase of 50 inches or less, and overall steering and a seat designed to be straddled.

**Alternate Vehicle** - An alternate vehicle is a piece of mechanized equipment capable of on or off-road travel and designed to provide a means of transport for one or more individuals. Alternate vehicles include but are not limited to, multi-track or multi-wheel vehicles, ATVs, personal mobility transport devices, motorized scooters, agricultural carts, go-peds, amphibious machines, ground effect air cushion vehicles, motorized roller blades, go-carts, gas powered skate boards, wind powered vehicles or other means of transportation deriving motive power from a source other than muscle (hand or foot) power.

**Bus** - A bus is a motor vehicle designed to transport nine or more people, including the driver. It is a commercial motor vehicle if it is used in commercial enterprise.

**Bicycle** - A vehicle upon which a person may ride and which is propelled by human power applied to pedals. It may have either two wheels in tandem, or three wheels-two parallel and one forward.

**Commercial Motor Vehicle** - Any vehicle in commerce with a GVWR or GCWR of 10,001 pounds or greater; or in commerce and is equipped to transport other motor vehicles by means of winches, cables, pulleys, or other equipment for towing, pulling, or lifting; or hauling hazardous materials requiring placarding.

**Crosswalk** - That portion of a roadway included in the prolongation or connection of the lateral lines of sidewalks or any portion of the roadway distinctly indicated for pedestrian crossing by lines or other marking.

**Farm Vehicle** - A vehicle exclusively used as an implement of husbandry, it is classified as a farm vehicle.

**Golf Cart** - A motorized cart designed for transporting persons playing golf and their equipment on a golf course. These vehicles typically do not exceed 15 to 20 mph. They shall not be classified as a GMV.

**Government Motor Vehicle (GMV)** - A motor vehicle that is owned, leased (includes General Services Administration vehicle under control of Navy activities), or rented by the government (includes a vehicle rented by government personnel when authorized on their official travel orders) primarily designed for over-the-road operations; and whose general purpose is the transportation of cargo or personnel.

**Gross Combined Weight Rating (GCWR)** - A GCWR is the sum of the GVWRs for the units which make up a truck combination.

**Gross Vehicle Weight Rating (GVWR)** - A GVWR is a value specified by the manufacturer for a single-unit truck, truck tractor, or trailer. In the absence of a GVWR, an estimate of the gross weight of a fully loaded unit may be substituted.

**Intersection** - An intersection is an area which contains a crossing or connection of two or more roadways (not classified as driveway access). An intersection is embraced within the prolongation of the lateral curb lines or the lateral boundaries of the roadways if curbs are not present.

**Interstate Carrier** - An interstate carrier is any commercial vehicle that hauls between states, between two points in a single state by going through another state, or between two places in a state with cargo that originated outside the state.

**Intrastate Carrier** - Any commercial motor vehicle which does not meet the requirement of an interstate carrier would be classified as an intrastate carrier.

**Light Rail** - A vehicle other than a railroad train for transporting persons or property upon rails.

**Low Speed Vehicle (LSV)** - A vehicle defined in FMVSS 500 for use on streets, roads, and highways and equipped with the minimum motor vehicle equipment appropriate for motor vehicle safety, and has four wheels in contact with the ground in normal operation; has a speed attainable of more than 20 mph, and not more than 25 mph on a paved level surface; and has a gross vehicle weight rating of less than 3,000 pounds.

**Median** - An area of a traffic way between parallel roads that separates travel in opposite directions.

**Motorcycle** - A motor vehicle designed to travel on not more than three wheels in contact with the ground and has an engine greater than 50cc in displacement.

**Moped** - A motor driven cycle that has an engine displacement of 50 cc's or less and is designed for highway use. This excludes motor driven toys including, go-peds, mini-scooters, pocket bikes and motorized skateboards.

**Motor Vehicle** - Any mechanically or electronically powered vehicle designed for highway use.

**Pedestrian** - Any person who is not an occupant of a vehicle. This includes persons operating mechanized toy vehicles, skateboards, etc., who are not otherwise classified as occupant in a motor vehicle.

**Private Motor Vehicle** - A vehicle owned, leased, rented or controlled by an individual in a personal capacity. A trailer being towed by a PMV is considered part of the vehicle.

**Private Property** - Private property is property that is not included in the traffic way. Private property is not maintained or regulated by state or local transportation departments. Private property includes forest service roads.

**Railway Vehicle** - A vehicle designed for moving persons or property from one place to another on rails. When the vehicle is on rails, it is not considered a motor vehicle.

**Roadside** - Is the outermost part of the traffic way from the property line or the side or border of the road.

**Roundabout** - A circular intersection joining two or more streets which feeds traffic into a circulatory roadway that surrounds a central island.

**School Bus** - A school bus is a motor vehicle which is owned or under contract to a public school or governmental agency and is used for the transportation of school children to or from public school or school activities. Any automobile, bus, van, utility vehicle, truck, or other vehicle that is designed for the transportation of school children and which meets the criteria above qualifies as a school bus.

**Semi-trailer** - A semi-trailer is a trailer (other than a pole trailer) designed for carrying property and constructed so that part of its weight rests upon or is carried by the towing vehicle.

**Separator** - The area of a trafficway between parallel roads separating travel in the same direction, or separating a frontage road from other roads is called a separator.

**Shoulder** - A shoulder is that part of the trafficway contiguous with the roadway for emergency use, for accommodation of stopped road vehicles, and for lateral support of the roadway structure.

**Single-unit truck** - This truck consists of a single motorized transport device. When connected to a trailer, such a device may be part of a truck combination.

**SUV** - A sports utility vehicle as defined by the manufacturer.

**Toy vehicle** - Any vehicle, whether or not home-built by the user that has wheels with an outside diameter of not more than fourteen inches and is not designed, approved, or intended for use on public roadways or highways. Toy vehicle includes, but is not limited to, gas-powered or electronic-powered vehicles commonly known as mini bikes, "pocket bikes", kamikaze boards, go-peds, and stand-up scooters.

**Traffic accident** - Traffic accident is defined as unintentional injury or damage caused by the movement of a motor vehicle or its load.

**Trafficway** - A trafficway is any land way open to the public as a matter of right or custom-for moving persons or property from one place to another.

**Trailer** - A trailer is a road vehicle designed to be drawn by another road vehicle. This includes pole trailers, semi-trailers, and full trailers.

**Transport device** - Any device designed primarily for moving persons or property along with the device itself from one place to another is a transport device. Weapons and devices used within the confines of a building are not included. Human-powered devices that are not propelled by pedaling (such as skis or roller skates) are also excluded from this definition. Examples of devices which fit this definition include: airplanes, ships, helicopters, hovercraft, trains, snowmobiles, automobiles, buses, trucks, trailers, motorcycles, bicycles, mopeds, golf carts, and others.

**Truck** - A truck is a motor vehicle designed primarily for carrying property. Included are single-unit trucks and combinations.

**Truck combination** - A truck consists of a single-unit truck tractor together with one or more attached trailers.

**Truck tractor** - A truck tractor is a motor vehicle consisting of a single motorized transport device designed for drawing trailers.



# STATE ABBREVIATION CODES

|                                  |                            |                          |                          |
|----------------------------------|----------------------------|--------------------------|--------------------------|
| <b>AL - Alabama</b>              | <b>AK - Alaska</b>         | <b>AZ - Arizona</b>      | <b>AR - Arkansas</b>     |
| <b>CA - California</b>           | <b>CO - Colorado</b>       | <b>CT - Connecticut</b>  | <b>DE - Delaware</b>     |
| <b>DC - District of Columbia</b> | <b>FL - Florida</b>        | <b>GA - Georgia</b>      | <b>HI - Hawaii</b>       |
| <b>ID - Idaho</b>                | <b>IL - Illinois</b>       | <b>IN - Indiana</b>      | <b>IA - Iowa</b>         |
| <b>KS - Kansas</b>               | <b>KY - Kentucky</b>       | <b>LA - Louisiana</b>    | <b>ME - Maine</b>        |
| <b>MD - Maryland</b>             | <b>MA - Massachusetts</b>  | <b>MI - Michigan</b>     | <b>MN - Minnesota</b>    |
| <b>MS - Mississippi</b>          | <b>MO - Missouri</b>       | <b>MT - Montana</b>      | <b>NE - Nebraska</b>     |
| <b>NV - Nevada</b>               | <b>NH - New Hampshire</b>  | <b>NJ - New Jersey</b>   | <b>NM - New Mexico</b>   |
| <b>NY - New York</b>             | <b>NC - North Carolina</b> | <b>ND - North Dakota</b> | <b>OH - Ohio</b>         |
| <b>OK - Oklahoma</b>             | <b>OR - Oregon</b>         | <b>PA - Pennsylvania</b> | <b>RI - Rhode Island</b> |
| <b>SC - South Carolina</b>       | <b>SD - South Dakota</b>   | <b>TN - Tennessee</b>    | <b>TX - Texas</b>        |
| <b>UT - Utah</b>                 | <b>VT - Vermont</b>        | <b>VA - Virginia</b>     | <b>WA - Washington</b>   |
| <b>WV - West Virginia</b>        | <b>WI - Wisconsin</b>      | <b>WY - Wyoming</b>      |                          |

# VEHICLE BODY STYLE ABBREVIATIONS

Use the one that best describes the vehicle.

These descriptions were derived from several sources to include, the Second College Edition of the American Dictionary, and the Standard Catalog of American Cars.

AM - Ambulance. A vehicle equipped to transport the sick and injured.

BU - Bus. A large vehicle for carrying passengers.

CP - Coupe/2D. A two-door passenger vehicle.

CT - Camper Trailer. A wheeled vehicle without motive power, less than 26' long that is pulled and is commonly used for temporary living/sleeping.

CV - Convertible. A passenger car with a convertible or removable top

HB - Hatchback. A passenger car with a rear lift-gate

LM - Limousine. A large passenger vehicle usually driven by a chauffeur and sometimes has a glass partition separating the passenger compartment from the driver's seat.

MC - Motorcycle. A vehicle with three wheels or less in contact with the ground.

MT - Motor Home. A vehicle built on a truck chassis and designed to serve as self-contained living quarters for travel.

NV - Neighborhood Vehicle. A electrically or gas powered vehicle that does not exceed 25 miles per hour.

PK - Pickup. A light truck with an open bed.

PV - Passenger Van A fully enclosed vehicle (built on a truck chassis) to transport passengers. Has seats throughout; usually has windows in rear compartment.

SD - Sedan/4D. A four-door passenger vehicle

TK - Truck. A variety of heavy vehicles designed to carry cargo.

TL - Trailer. A wheeled vehicle, without motive power and an empty weight over 2,000 lbs., used to carry a load and pulled by a motor vehicle.

TR - Tractor. A motor vehicle designed and used primarily for drawing other vehicles (normally a large trailer) but not constructed to carry a load other than a part of the weight of the vehicle that it pulls. Tractor has a cab only, no bed.

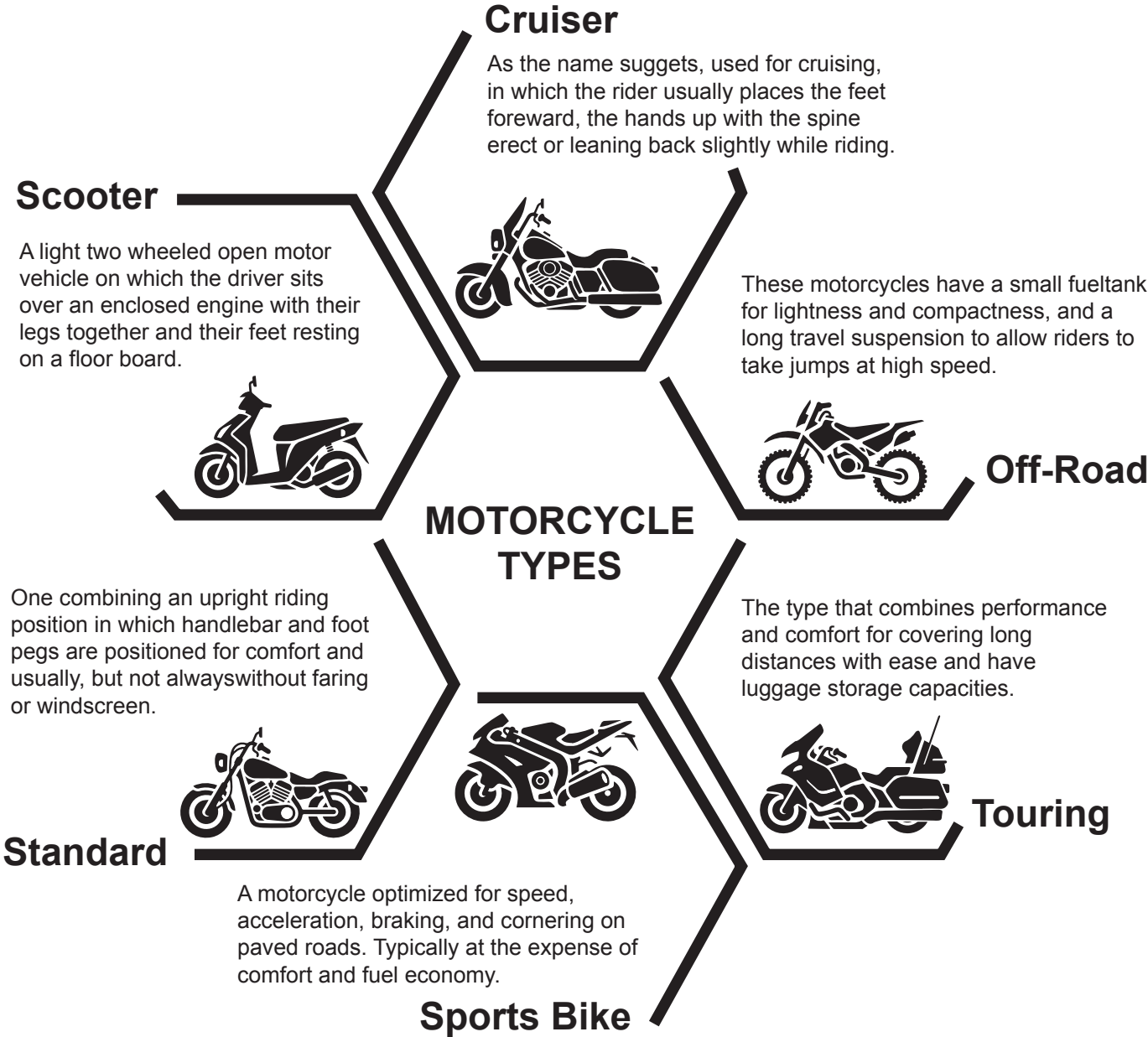
TT - Truck Tractor. A motor vehicle designed & used primarily for drawing other vehicles (normally a large trailer) but is constructed to carry a load other than a part of the weight of the vehicle that it pulls. Tractor has a cab and a bed.

TU - Trailer Utility. A wheeled vehicle without motive power and an empty weight less than 2,000 lbs., used to carry a load and pulled by a motor vehicle.

UT - Utility Truck. A vehicle that is used to transport passengers. Rear seat may be removed to carry cargo.

VN - Truck Van. A fully enclosed vehicle (built on a truck chassis) to transport cargo.

# MOTORCYCLE TYPES



# COMMERCIAL VEHICLE TYPES

Bus



Single unit truck – 2 axles



Single unit truck – 3 axles or more



Truck with trailer



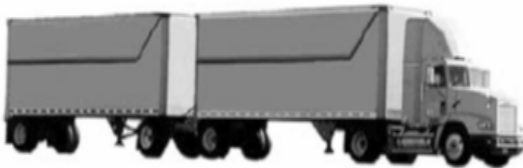
Truck tractor (Bobtail)



Tractor with semi-trailer



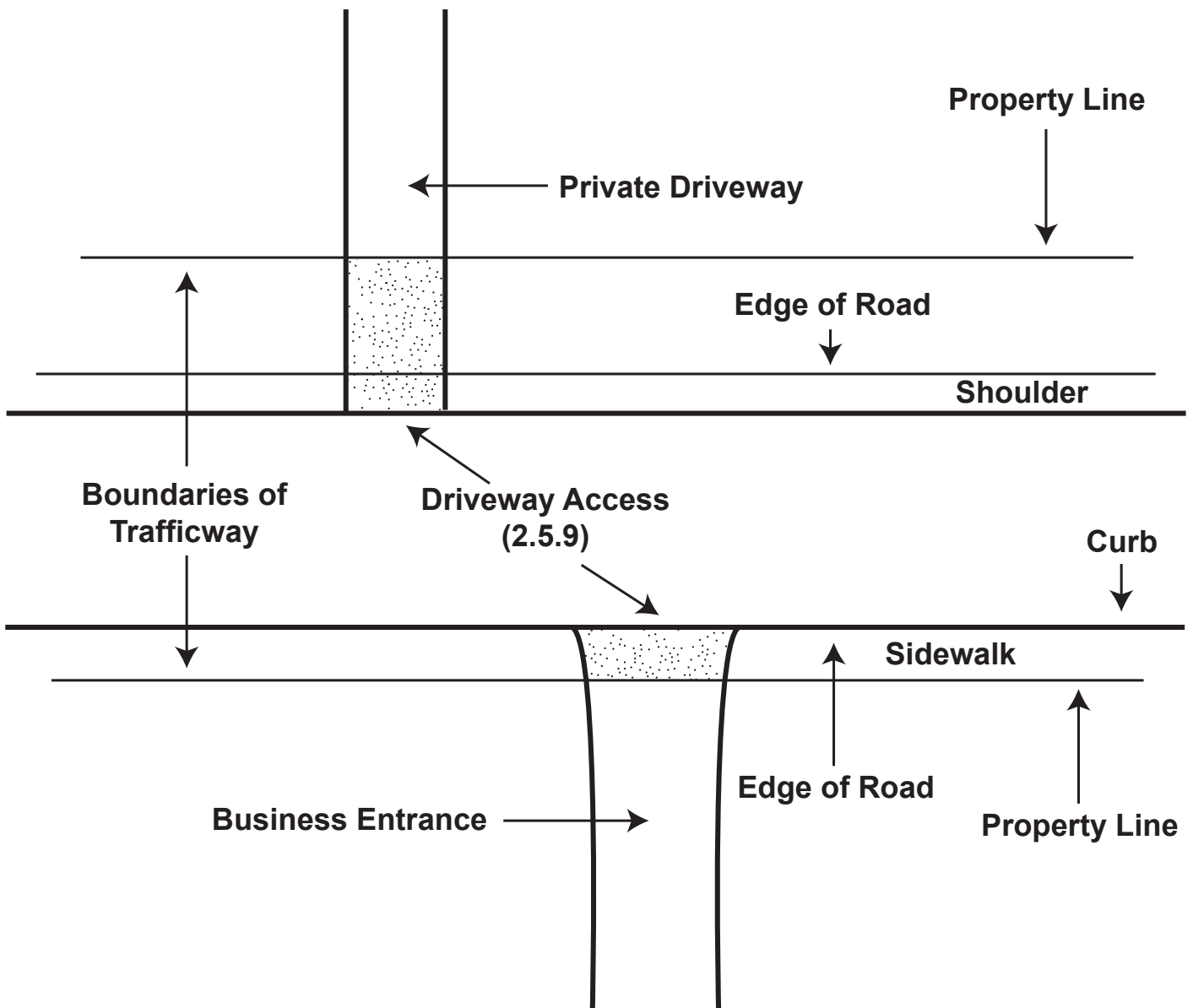
Tractor with double trailers



Tractor with triple trailers



# HIGHWAY/DRIVEWAY TERMS DIAGRAM





## RECOMMENDED READING

2014 release of Traffic Crash Investigation, 11th Edition by J. Stannard Baker, Lynn B. Fricke and other contributing crash investigation experts

Basic Guide to Accident Investigation and Loss Control, Volume 3 by Jeffery W. Vincoli

Vehicular Accident Investigation and Reconstruction by Donald J Van Kirk





# PRESERVING COMBAT READINESS



Private Motor Vehicle (PMV) & Government Motor Vehicle (GOV)

## MISHAP INVESTIGATION GUIDE

MAY 2018

# SAVING LIVES

Recommendations for changes or updates to this document can be submitted to the Naval Safety Center at [M\\_NRFK\\_SAFE\\_Code20\\_UD@navy.mil](mailto:M_NRFK_SAFE_Code20_UD@navy.mil).



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