COMBATTING THE
BLUE THREAT

From the Director...

The New Marine Corps Safety Management System

A Pathway to the Normalization of Excellence

Oorah Marines! You have probably heard a salt-encrusted Master Gunz or Captain with the thousand yard stare bark out, "A tactically sound plan is inherently safe!" This is absolutely true and reveals a key mistake we are repeatedly making. A plan is tactically sound if we identify all of the threats, hazards, and potential errors that will prevent the mission from being accomplished. To produce a tactically sound plan you need experienced and trained Marines who know what they are doing, and most critically, have the time to do detailed planning. There is a feeling of confidence and calm associated with a squared away plan, time for rehearsals, and a final moment to carefully review the plan and ask yourself "are we good to go?" before stepping off. We routinely make the mistake of jerking ourselves through a knot hole by not allowing enough time to produce a tactically sound plan. The predictable and repeated result is mission failure, injury, and death.

This Safety Management System will help you and your Marines identify the hazards you face. Let's stop talking about safety. Let's start talking about the Normalization of Excellence.

Col Marty "Trainwreck" Bedell
Director, CMC Safety Division

Mishap Costs and Consequences

Over the last five years (FY16-20), the Marine Corps has suffered losses in fatalities, personal injuries, military equipment, and material losses totaling:

$5,023,414,417

(Source: Naval Safety Center)

Inside This Edition

It's Time for a Change

On 15 October 2020, Marine Corps Order (MCO) 5100.29C was published, launching the new Marine Corps Safety Management System (MCSMS). The MCSMS provides a systems approach to the management of risk to ensure that informed risk decisions are being made at the correct levels. Fundamentally, we will refocus on operational excellence and meeting high standards, and less on preventing mishaps.

DID YOU KNOW? Each command creates their own SMS within the framework provided by the MCSMS based on their mission, geolocation, composition of personnel, and specific hazards, on and off duty.

FY21 FATALITIES	Aviation	Ground On-Duty	Car	Motorcycle	Other	TOTAL
as of 26 February 2021	0	0	8	3	0	11

www.safety.marines.mil *Numbers in fatality categories are subject to change based on final disposition of investigation.* Vol. 21 - Ed. 1

Recent Class A Mishaps

- **AVIATION**

  NONE

- **GROUND ON-DUTY**

  NONE

- **OFF-DUTY (CAR)**

  6 Feb 2021: Harvey, LA – LCPL arrived at scene of a single-vehicle accident and exited vehicle to render assistance and was subsequently struck by an SUV travelling through the accident zone. SVM was declared deceased at the University Medical Center New Orleans.

  3 Jan 2021: Homer, GA – Marine was the driver of a single vehicle accident and was pronounced dead at the scene. Two other passengers, non-service members, involved were also confirmed deceased on scene.

  22 Nov 2020: Cheverly, MD – LCPL involved in a motor vehicle accident on Highway 295, pronounced deceased at hospital.

  21 Nov 2020: Greensboro, NC – CPL involved in a motor vehicle accident on I-85, deceased at scene.

  4 Nov 2020: Palm Springs, CA – LCPL involved in a vehicle accident, sustained multiple serious injuries. Succumbed to injuries, deceased on 15 Nov 20.

  31 Oct 2020: San Diego, CA – LCPL vehicle struck on driver's side by another vehicle. Pronounced deceased at hospital.

  14 Oct 2020: Escondido, CA – LCPL as passenger, killed in a multi-car event on the Interstate.

  12 Oct 2020: Pemberton Township, NJ – LCPL involved in a single vehicle accident, died at scene.

- **OFF-DUTY (MOTORCYCLE)**

  7 Jan 2021: A Marine was riding a motorcycle and lost control, hitting another vehicle. Despite wearing PPE, the Marine was pronounced deceased at the scene.

  19 Dec 2020: Stafford, VA – LCPL on motorcycle attempting to merge on Interstate and was forced off the road and ejected from motorcycle. Pronounced dead at the hospital.

  22 Nov 2020: Bonsall, CA – CPL involved in a motorcycle accident, deceased at scene.

- **OFF-DUTY (OTHER)**

  NONE

FY21 Class A Mishaps

0 GROUND MISHAP
resulted in the **death of zero Marines**

3 MOTORCYCLE MISHAPS
resulted in the **death of three Marines**

8 CAR MISHAPS
resulted in the **death of eight Marines**

0 OTHER MISHAPS
resulted in the **death of zero Marines**

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Volume 1: MCSMS Overview

MCO 5100.29C updates and consolidates 18 previously separate policy documents into one Order providing the framework for the Marine Corps Safety Management System. Not only has this process involved reevaluating previously published safety policy and guidance across the Marine Corps, but it's also consolidated them under a single, governing framework. **Leadership will adopt and tailor the MCSMS framework to build their own safety managementsystems within this framework**.

The new MCSMS marks a shift in how safety is addressed, evaluated, and integrated into Marine Corps operations. Unlike the previous Safety Program, the MCSMS is a tailorable, systematic approach that integrates principles, tasks, and requirements into mission planning and execution. This is an important distinction. When implemented, the MCSMS operates at all levels in the chain of command and focuses on promoting the following tasks, processes, and operations that result in mission accomplishment:

Volumes:

- **Volume 1:** MCSMS Overview
- **Volume 2:** Risk Management
- **Volume 3:** Marine Corps Traffic Safety Program
- **Volume 4:** Marine Corps Aviation Safety
- **Volume 5:** Recreation and Off-Duty Safety (RODS) Program
- *Volume 6: Safety and Occupational Health Program
- *Volume 7: Marine Corps Radiation Safety Program
- *Volume 8: Explosives Safety Management System

* Note: Volumes 6, 7, and 8 in final staffing.

- **Clear and open channels of communication**
- **Acknowledging, addressing, and accepting risk at the appropriate levels**
- **Increased and accurate incident and near-miss reporting without fear of reprisal**
- **Continuous review and evaluation of current practices in order to improve them**

These are the characteristics that effectively mitigate risk across the Marine Corps. **This is what right looks like, and a culture that embraces and promotes these behaviors will result in increased readiness and improved tactical and operational capability.**

The Four Pillars of the Safety Management System

Change won't happen overnight, and the goals of the MCSMS present a fundamental shift in Marine Corps culture. The MCSMS is built upon four pillars. Organizational culture is the last and most difficult attribute to change.

Policy and Leadership

Safety policy included in the 5100.29C provides the requirements for a fully-functional SMS and establishes the expectations, objectives, participation, risk tolerance, and rules for personnel. Leadership is responsible for implementing and executing the MCSMS at all levels, communicating safety and risk management principles throughout the organization, and promoting a strong safety culture.

Risk Management

How we plan, operate, and train is a reflection of our unit's leadership, culture, and commitment to the MCSMS. It is critical to both mission accomplishment and the preservation of our personnel and equipment that risk management principles and processes are incorporated into all levels of planning and execution Risk management will be used to identify and assess hazards and to develop mitigating controls. Implemented control measures are then continuously monitored and analyzed to assess their effectiveness.

Safety Assurance

Safety assurance is the evaluation, review, and monitoring that assures commanders the elements of the MCSMS are being implemented, and it guides the process of continuously improving upon previous efforts. Assurance programs measure whether organizations conform to standards and are making progress toward established goals.

Safety Promotion and Training

People, policy, and tools comprise the MCSMS; the people with the training and access to the tools are what make the system work. As such, promotion and training are vital elements that enable Marines to grow into their roles and contribute to an effective safety management system. While regularly delivered formal and informal training are required to meet key safety, risk management, and position-specific requirements, it also presents the opportunity for sharing the accumulated knowledge gained from lessons learned, near miss and mishaps, and preventative or corrective actions. Promotion and training together teach personnel how to identify, report, and manage hazards and include processes for two-way communication up and down the chain of command.

DID YOU KNOW? Mishaps are prevented by utilizing engaged leadership, well-maintained and reliable equipment, adequate resource allocation, effective training, and proven risk management principles.

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The Cycle of Improvement: Plan-Do-Check-Act

The Plan-Do-Check-Act (PDCA) is an iterative, four-step management method used for the control and continuous improvement of processes and products.

The MCSMS incorporates the PDCA cycle across each of the Four Pillars by creating deliberate opportunities to refine and refocus suboptimal elements as trends develop, corrective actions succeed or fail, and new technology is introduced. Using the PDCA methodology ensures continuous improvement.
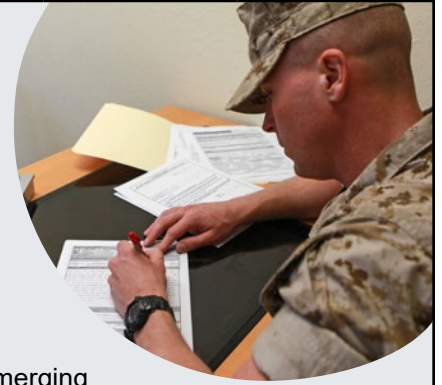
Plan
Establish the objectives and desired end state. Study programmatic shortfalls, emerging trends, and changing conditions. Outline possible countermeasures and the necessary policy, programs, processes, and actions necessary to deliver results in accordance with the desired outcome.

Do
Implement the plan, execute the process, or make the product.

Check
Compare the actual results (measured and collected in "Do" above) to the desired results (targets or goals from the "Plan"). Look for deviations in implementation from the "Plan" and "Do" that may have affected execution. Charting data will make it easier to see trends over several PDCA cycles, and to convert the collected data into the information needed to "Act."

Act
Apply corrective actions to the causes of differences between actual and desired results. Determine where to apply changes to improve the process or product. This part of the cycle should produce evidence of the future direction of the mishap prevention program and any needed changes to the policy, priorities, objectives, resources, or other program elements.

Implementation

Readiness and mission accomplishment are inextricably linked to safe operations. To that point, commanders need the coordinated efforts of the entire staff, engaged leadership, and expertise of their Executive Officer, Sergeant Major, department heads, and safety officer. Each plays a integral role in the commander's ability to tailor and establish a safety management system that answers the needs of their unit. Every unit's SMS should specifically take into account their mission, geolocation, table of organization and equipment with required and actual staffing levels, experience, and available materiel.

Clear communication at all levels is essential to uncover and identify barriers to mission accomplishment and provide commanders with the information necessary to proactively respond to perceived risks and continually evaluate strategies for strengthening their safety management system. The hierarchy of the unit should include a trained safety professional who is special staff with unfettered access to the commanding officer and has sufficient authority to represent and support the commander in the management of the safety management system.

Safety Assurance Cycle

- Spot Inspection
- Seasonal Inspection
- Quarterly Inspection
- 1 month
- Qtr 1
- Qtr 2
- Qtr 3
- Qtr 4
- 12 months
- Annual Inspection
- 24 months
- Safety Management System Self-Assessment
- 36 months
- Command Safety Assessment

DID YOU KNOW? An effective unit's SMS shall contain assigned personnel and deliberate procedures to identify hazards, assess risk, and implement safety controls

Safety Assurance

There's no improvement without evaluation, which is why safety assurance plays a large role in maintaining and refining the safety management systems once they've been implemented. The MCSMS employs various inspections and assessments to identify system deficiencies and opportunities for improvement, identify new hazards, measure the effectiveness of and the conformity to risk controls, and ensures compliance with regulatory requirements.

Marine Corps Safety Management System Requirements Tracker

To foster a better understanding of the Marine Corps Safety Management System, all O-5 commands will use the MCSMS Requirements Tracker to track and report their monthly status to the next higher headquarters no later than the first of each month. The tracker spreadsheet can be found on the SD website at https://www.safety.marines.mil/ mcsmsrequirementstracker/.

Higher headquarters echelons (MAG/Regt, Wing/Div, MEF, and MARFOR) have until the 15th of each month to submit an updated MCSMS Requirements Tracker, via their chain of command, to the Assistant Commandant via CMC Safety Division.

This is an interim reporting solution while a SharePoint tracker is fielded. The MCSMS Requirements Tracker will migrate to SharePoint in FY2021.
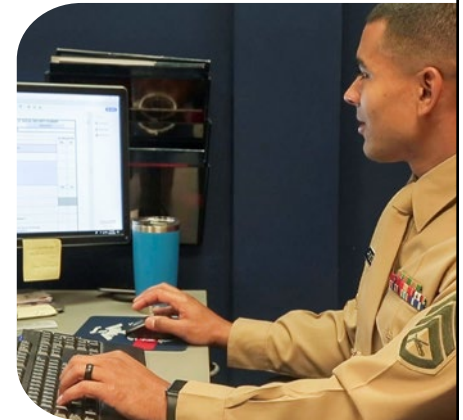
Volume 2: Risk Management

Performing on-duty tasks and off-duty activities on a day-to-day basis present a number of opportunities that regularly devolve into hazardous situations. It might be common to consider the risks involved with PT in summer heat, training exercises in the AAV, or cleaning your firearm. But how about taking a road trip? Cleaning the gutters? Playing a game of football? All of these represent circumstances that expose Marines to hazards, elevating the risk of injury.

Under the new MCSMS, Risk Management remains a high priority with an emphasis on incorporating the management of risk into an immersive safety culture that drives Marines' thought process and decision-making, both on and off duty.

For example, let's say you're making repairs to a piece of military equipment at your command. You will follow the established policies and procedures associated with the task, but you also want to continually evaluate the specifics of your circumstances:

Have I anticipated and managed any potential risks with proper planning?

Yes, I understand the hazards associated with the work being conducted, I'm using the appropriate maintenance manual, and I am utilizing the appropriate personal protective equipment (PPE).

Have risk decisions been made at the proper level?

The maintenance officer has established standard operating procedures in the shop to govern most tasks and activities. Any circumstances of the repair not explicitly covered in SOPs have been brought to their attention.

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Am I taking on any unnecessary risk?

Either I am prepared and informed about the work and expect it to be completed without incident, or I am enlisting the support of qualified personnel and/or other safeguards to successfully complete the task at hand.

Do potential risks outweigh the cost?

At my level and in this context, accepting unnecessary risk very likely does not. I do not need to expose others, myself, or the equipment in order to complete the repair.

Risk management under MCO 5100.29C intends to ingrain these fundamental principles into every Marine's decision-making process, both on duty and off duty.

Under the Order, the Marine Corps also introduces the Joint Risk Assessment Matrix, which establishes uniformity across the DoD in determining Risk Assessment Levels. The Matrix helps prioritize operations based on the probability and severity of potential hazards that may be present. If deliberate risk assessment needs to take place, the Matrix provides Risk Assessment Levels which grades the potential hazards and informs decision-making. The Joint Risk Assessment Tool (JRAT) – developed and hosted by the US Army's Combat Readiness Center Center (located at https://jrat.safety. army.mil/login. aspx)– provides a web-based platform that guides the user through a Matrix and serves as a transition tool for the Marine Corps.

JRAT also allows the chain-of-command to supervise and conduct quality control of the risk assessment process. The goal of establishing a philosophy in which risk management is a natural part of operations, and where the necessary tools are provided to encourage that practice, is to solidify a culture that values safety as an integral component of its tactical and technical proficiency.

Volume 3: Traffic Safety Program

When driving your car or riding your motorcycle, the hazards ahead are constantly changing: the road bends left or right, weather conditions improve or worsen, a bicyclist temporarily occupies your lane. And situations can change as suddenly as the car ahead of you slamming their the brakes or a deer bounding across the road in front of you! Similarly, the Marine Corps' Traffic Safety Program continues to change and evolve as leadership navigates policies and best practices to keep Marines and their fellow travelers safe and alive.

Under **MCO 5100.29C**, motorcycle training has had some changes. Most notably concerning training levels, licensed riders are no longer required to complete Level 1 training. Licensed riders will instead take Level 2 training, which is required of all military motorcycle riders within 180 days of becoming a licensed rider or otherwise completing the Level 1 training. Simple, right?

Level 3 training is highly recommended for all military motorcycle riders who have completed their Level 2 training. Level 2 or Level 3 refresher training is now required every five years, rather than every three; however, Marines are encouraged to take it annually.

Once training is completed, Marines are expected to provide completion cards or certificates to their respective S-3/Training officer or other appropriate personnel for entry into MCTIMS/MCTFS. Additionally, those personnel should also be able to assist riders in registering and receiving orders for the necessary motorcycle safety courses.

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Volume 4: Aviation Safety

The Aviation Safety Awareness Program (ASAP) has continued to drive changes in improving Aviation safety as its implementation has caused increased use throughout the Marine Corps.

ASAP is an O5-O6 Commander's communication tool that allows all Marines and Sailors an anonymous, non-CAC, web-based, PED-accessible environment to provide commanders direct insight into the total flight operations environment through systematic identification of potential hazards and human errors within their unit.

Safety billet holders and key leaders are able to both see the "event" reports as they are made, and then provide a response to reports as desired.

Per the Order, compliance with all aviation-specific safety requirements will be tracked using the ASAP site at https://asap-usmc.com under the tracker tab > standard report.

Additionally, the School of Aviation Safety now has three training courses available: Aviation Safety Command Course, Aviation Safety Manager Course, and the Aviation Safety Officer Course. All seats are coordinated by CMC Safety Division, Aviation Branch.

Pilots in command and mission commanders shall conduct a risk assessment prior to flight. This Order adds the requirement to use a Risk Assessment Worksheet specific to type, model, and series of aircraft. The Risk Assessment Worksheet may take any form the unit commander deems appropriate and shall be aligned with and include all risk assessment guidance provided by MAG and MAW commanders.

Volume 5: Recreation and Off Duty Safety Program

The value of a Marine's wellbeing doesn't decrease in importance when "off the clock." Maintaining operational readiness and warfighting capabilities does indeed extend after hours and on weekends, and MCO 5100.29C emphasizes the importance of Recreational and Off Duty Safety (RODS) by incorporating it into the latest iteration of these policies. Historically addressed separately, RODS is now part of the MCSMS as a means to build and reinforce a comprehensive risk management culture. Like other Volumes of the MCO, responsibilities exist at all levels of the Marine Corps. CMC(SD) leadership will continue to develop policies, convey requirements, collaborate with MCCS, conduct awareness activities, and analyze mishap trends and factors. Commanders and Directors at the Naval Safety Center, MCICOM, and Manpower & Reserve Affairs all play a role in support of these initiatives. Installation Commanders, MCCS Directors, COs, and RODS Program Managers also contribute to safety policy observation, training, and reporting practices as it relates to recreational and off duty activities.
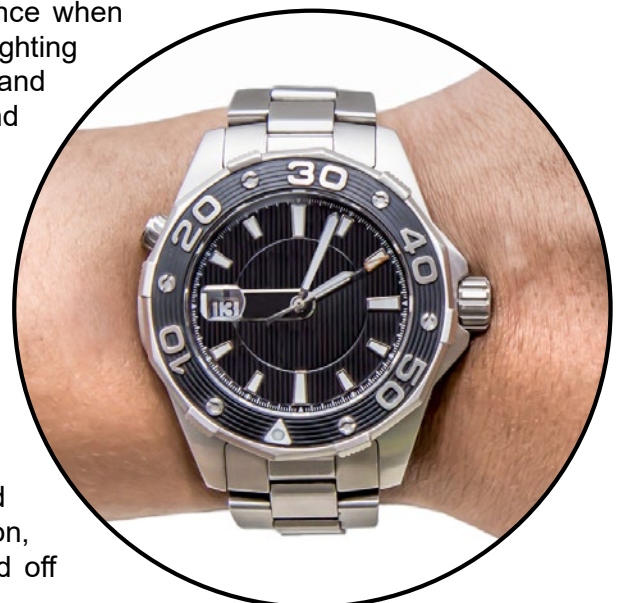
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RMI SIR: Learning From Our Past and Each Other

At this point, it's clear that a constant, deep-seeded culture of safety across the entire Marine Corps – at all levels and at all times – has been a priority throughout MCO 5100.29C. Leadership responsible for the health and safety of their Marines are expected to drive this culture home through their engagement with their respective command, and with the personnel that inform Marine Corps safety policy. The Risk Management Initiative (RMI) is therefore designated as a mission-essential capability that improves operational readiness across the entire Department of the Navy, by improving upon safety data collection, management, analysis, and dissemination of lessons learned to Marines and Sailors.

Streamlined Incident Reporting (SIR), in particular, goes a long way in supporting the Marine Corps' RMI goals. RMI SIR is a web-enabled, role-based mishap reporting and analysis system accessible worldwide with a Common Access Card (CAC). SIR is a single integrated mishap system for reporting aviation, afloat ground and motor vehicle mishaps compliant with Department of Defense (DOD) safety business rules. RMI SIR vastly expands the capabilities for safety professionals and leadership to identify trends and produce analyses that lead to recommendations and mishap prevention. With enhancements that improve the reporting process, expand accessibility and capabilities, and track/verify injuries, SIR provides an improved platform to report RMI appropriate data as the system replaces the previously utilized Web Enabled Safety System (WESS).

Along with SIR, Safety Program Management (SPM) is meant to further support command and installation safety by providing users with resources to plan and conduct a full-fledged safety and occupational health program. Specific capabilities will include: Confine Space Entry, Deficiency Abatement, Fall Protection, Inspections, Job Hazard Analysis, Medical Surveillance, Respiratory Protection, Safety Committee, Self-Assessment and Training.

Another key change that comes with RMI-SIR is the process for endorsing Mishaps. The Memorandum of Final Evaluation (MOFE) is the official fleet position with regard to finding and recommendations resulting from mishaps. Endorsements/recommendations will now be submitted in a parallel format – rather than the serial format previously maintained in WESS. The MOFE does not replace the SIB's final message; rather, it ensures that the quality control standards, actionable recommendations, and compliance standards are maintained to identify hazards and support future event prevention efforts. All MOFE comments must be received within the 45-day deadline, with the intent to quickly turn around safety recommendations and add value to the Marine Corps.