How are we doing in FY19 so far?

Marines, we are quickly approaching the one-year anniversary of the launch of this newsletter, “Combatting the Blue Threat.” I urge you to take the time to assess what you’re doing to reduce mishap fatalities and improve combat readiness, and implement course corrections where necessary. Quarter 1 of FY19 is already behind us, and there’s still time to realize the Commandant’s Safety Action Campaign goal of reducing mishap fatalities by 50% by the end of FY19.

At the current pace, we will match or exceed last year’s fatalities. Our top killers are still PMV-4s and PMV-2s. Though Class A aviation mishaps are down this year from last, one tragic aviation mishap claimed the lives of six Marines.

FY19 CLASS A MISHAPS

2 CLASS A AVIATION MISHAPS resulted in the death of six Marines.

- 5 December 2018: Class A, Philippine Sea; F/A-18D and KC-130J collided while performing fixed wing aerial refueling mission. F/A-18 aircrew ejected with one fatality. Crew of five in the KC-130 were all fatalities.


DID YOU KNOW? You can find previous editions of the Blue Threat on our website at: www.safety.marines.mil.
FY19 CLASS A MISHAPS (cont’d)

GROUND ON-DUTY

2 CLASS A GROUND MISHAPS resulted in the death of one Marine and the permanent, total disability of one Marine.

• 6 November 2018: Class A, Coolidge, AZ; E-4 suffered a permanent total disability during a training course.
• 1 January 2019: Class A, Washington, DC; E-3 died after gunshot during guard company duty changeover.

OFF-DUTY

5 CLASS A CAR MISHAPS resulted in the death of five Marines.

• 12 October 2018: PMV-4, Snyder, TX; E-1 drifted onto the shoulder of a highway, over-corrected, and collided head-on with a tractor-trailer.
• 22 December 2018: PMV-4, Newaygo, MI; E-3 was involved in an off-duty vehicle accident and declared deceased on the scene.
• 2 January 2019: PMV-4, Beckley, WV; E-7 died when a garbage truck collided with his vehicle.
• 14 January 2019: PMV-4, El Paso, TX; E-1 died in a head-on collision.
• 16 January 2019: PMV-4, Jeffersonville, IN; E-3 died when a dislodged tire from another vehicle struck her windshield, killing her immediately.

4 CLASS A MOTORCYCLE MISHAPS resulted in the death of four Marines.

• 19 October 2018: PMV-2, Richland, NC; E-3 died in a motorcycle mishap on his way to work.
• 16 November 2018: PMV-2, Temecula, CA; E-5 motorcyclist died when he collided with another vehicle.
• 18 November 2018: PMV-2, Julian, CA; E-4 died on 22 Nov from injuries sustained in a single-vehicle motorcycle mishap.
• 28 December 2018: PMV-2, Garland, TX; E-6 motorcyclist died in a multi-vehicle mishap.

3 CLASS A OTHER MISHAPS resulted in the death of three Marines.

• 20 October 2018: Recreational, Havelock, NC; E-3 died when his weapon accidentally discharged while he was cleaning it.
• 18 November 2018: Pedestrian, Philadelphia, PA; E-8 died when he was hit by a vehicle while crossing the street.
• 1 January 2019: Recreational, Wyoming, MI; E-3 could not be revived after passing out on couch.
Procedures are Written in Blood

From the Director...

As some say, “These manuals are written in blood,” informed by others who have gone before and made mistakes that have cost them dearly. Risk management is the basis for every process and procedure you’re asked to follow during training and execution. Choosing to bypass any of the steps prescribed in our law, order, policy, or TTPs undermines the processes designed to protect you and your equipment. These practices and procedures are tried and true, reviewed and analyzed, and updated to reflect each and every condition that may be encountered. Our Safety Division staff reviews incidents and mishaps, performs case analyses to understand and address root causes, and ensures information is disseminated across the Marine Corps. Nearly every mishap is the result of someone failing to follow written procedures that are already addressed and in place in law, order, policy or technical manuals.

Execute procedures by the book, stay vigilant, and watch out for one another!

This edition’s Blue Threat is the mishandling of ordnance, which can be especially dangerous because the potential for injury is both immediate and severe.

Combatting the Blue Threat:
The occurrence of ordnance mishaps can easily be reduced. By following TTPs, Marines avoid the unintended consequences that result from these incidents, including death or destruction of resources. Know the individual steps that need to be followed for each operation and use established checklists to ensure safety and mission success. If you believe there are efficiencies to be gained by doing things differently, inform your unit leader, who will take it up the chain of command to be vetted by the appropriate Subject Matter Expert (SME) and incorporated into the applicable manual.

ORDNANCE-RELATED MISHAPS

<table>
<thead>
<tr>
<th>Class:</th>
<th>FY14</th>
<th>FY15</th>
<th>FY16</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>6</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td>B</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

DID YOU KNOW? Bombs in your backyard! The total land area in the United States that potentially contains UXOs is estimated to be the size of Florida!
ORDNANCE MISHAP CASE STUDIES

GROUND

PROBLEM
Marines unqualified to handle ordnance and failure to follow ordnance handling procedures.

BACKGROUND
After a training event, a Marine was tasked with collecting unexpended pyrotechnic devices for storage. The Marine recognized that the devices in the storage area were stored incorrectly. Specifically, shipping containers labeled red star clusters actually contained white star parachutes. When the Marine removed and placed the devices into their appropriate containers, some of the firing caps remained in the container with firing pins pointed up. The Marine placed a white star parachute onto the firing cap, primer down. While closing the container, the firing pin struck the primer and ignited the white star parachute, causing the Marine to suffer third-degree burns to his body.

RECOMMENDATIONS
Commanders are responsible for ensuring that personnel are properly qualified to handle class V(W) ammunition per orders and directives. Before conducting operations, leaders must ensure that Marines handling ordnance understand their capabilities and limitations as well as the proper handling, storage, and transportation procedures specified for ordnance. Some munitions have associated Ammunition Information Notices (AINS) that contain special handling instructions. Officers in charge (OIC) of training should inquire with their command’s ammunition section as to whether ordnance that will be used during a training event have associated AINS. If the answer is yes, all Marines must receive the appropriate training. MCO 3570.1C — Range Safety specifically tasks OICs with the requirements associated with handling, transporting, and storing ammunition and explosives from the time of receipt, to the time of expenditure, to turn in. Leadership must supervise Marines handling ordnance during every phase.

CAUSAL FACTORS IDENTIFIED

<table>
<thead>
<tr>
<th>Human Factors</th>
<th>Material Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Procedures not followed correctly</td>
<td></td>
</tr>
<tr>
<td>Wrong choice of action during an operation</td>
<td></td>
</tr>
<tr>
<td>Unintended operation of equipment</td>
<td></td>
</tr>
<tr>
<td>Checklist not followed correctly / ignored a caution or warning</td>
<td></td>
</tr>
<tr>
<td>Rushed or delayed a necessary action / inadequate real-time risk assessment / negative habit transfer</td>
<td></td>
</tr>
</tbody>
</table>
AVIATION MISHAP CASE STUDIES

PROBLEM

Daily inspection procedures for loading ordnance onto an F-18 routinely included a visual inspection of the BRU-41 improved multi-ejector rack (I-MER), but it was not included on the inspection checklist.

BACKGROUND

In 2016, an F/A-18A+ was conducting training in a known range complex when the aircraft experienced an un-commanded release of an MK-76 practice bomb without CAD activation. The MK-76 fell to the ground safely and did not cause any damage or injury. It was discovered that during the daily maintenance inspection the BRU-41 I-MER was not inspected. After review by technical experts, it was determined that the I-MER was giving false indications that the MK-76 was properly locked into the I-MER, which led to the un-commanded release of the MK-76 during training.

RECOMMENDATIONS

This HAZREP could have easily become a mishap had the MK-76 departed over a populated area. The squadron accurately identified a gap in the inspection process, relayed it to the fleet, and made a recommendation to include inspection of the I-MER prior to loading MK-76 practice bombs in every applicable manual and checklist. This is a perfect example of how our TTPs are defined and refined by the review and analysis of actual hazards.

Avionics, weapons systems, and sensors advance with technology, leading to aircraft upgrades. In addition to upgrades in aircraft components, tools are improved to make maintenance procedures more efficient. Everyone involved in aircraft upgrades or the introduction of a new tool must closely scrutinize the new installation/maintenance procedure to ensure completeness.

“Verify all daily maintenance requirements are completed IAW NAVAIR 11-75A-603 WP 5 Table 1 procedures.”

DID YOU KNOW?
Our previous edition of Combatting the Blue Threat described awards Marines are eligible to receive. We’d like to congratulate Staff Sergeant Gregory Bogaczk for his exemplary work on various traffic safety programs. Sergeant Bogacz in the Marine Corps recipient of the 2019 GEICO Military Service Award, receiving a plaque and $2,500 for his achievement; BZ!
EXPLORATION

PROBLEM

Explosives are designed to kill people and destroy buildings. In a combat environment, explosives are being stored in close proximity to mess halls, office spaces, and maintenance areas.

BACKGROUND

To ensure explosives operations were being conducted safely, Technical Assist Visits (TAVs) were performed at explosives storage sites in the Iraqi theater of operations, including unit areas and airfields. Explosives were being stored too close to billeting areas and storage sites were not properly barricaded, leaving both vulnerable to the blast or fragments from indirect fire.

RECOMMENDATIONS

Facilities were moved outside of explosives safety arcs. Storage sites were oriented in a safe direction and explosive limits identified using placards. In addition, storage was limited to only mission-essential ammunition, and properly designed barricades were constructed to protect personnel and equipment.

DID YOU KNOW?

You can contact us with questions, comments, stories, or suggested topics you’d like to read about. Email us at BlueThreat@usmc.mil.
That’s the way we’ve always done it...

Our response to this statement should be, “that’s not the answer I am looking for…print off that procedure and let’s see how we should do it according to the applicable manual.”

Words have meaning, especially when we’ve written them down and published them. We stop considering their meaning when we think we know a better way, but do we? Execution steps become routine, maybe we believe we can cut corners to realize efficiencies, and then cutting corners becomes the normalization of deviance. The normalization of deviance quickly morphs into a standard of non-compliance and festers until other deviations are normalized. The end results are a culture of non-compliance, increased mishaps, and decreased readiness.

Ordnance operations have very little margin for error. The procedures contained in ordnance operations SOPs are not “swags”; they are formulated, tested, and finalized by SMEs who truly understand every aspect of the gear and ordnance in use. They understand the second and third order effects that might not always manifest themselves. A small mistake can have devastating results.
Marine and Family Programs Update

How can we best help a Marine or attached Sailor who has already been impacted by…?

Marine and Family Programs is committed to ensuring the Marine Corps can apply both response and prevention approaches.

We must create a strong prevention capacity to educate leaders at all levels of the Marine Corps about the difference between prevention and response and the importance of understanding and applying prevention strategies with their Marines.

The end state is to increase effectiveness, efficiency, and collaboration with leaders and relevant subject matters experts within a command.

**Call to ACTION:**

1. Create solution-focused discussions with your Marines and attached Sailors. Talk about both healthy relationships and interactions and effective communication.

2. Be proactive in creating a positive culture in your command. Set the standard for a professional working environment. Focus on engaging everyone.

3. Talk to your Marines regularly, not just when an incident occurs. Have informal conversations about problem solving, healthy boundaries, and leadership frequently.

4. Emphasize that your Marines and attached Sailors are part of the solution.

5. Encourage your Marines and attached Sailors to come up with solutions to prevent problematic behaviors. Help them find their motivation to be part of the solution. We all have mandates tasked through our chain of command; successful prevention requires intrinsic motivation.