



NAVAL SAFETY COMMAND

SAFETY AWARENESS DISPATCH



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ATV (and Dirt Bike) Mishaps – The Saga Continues

While waiting for the Navy's Risk Management Information (RMI) system to finish capturing incident data from a search query using terms such as "ATV," "off-road" and "dirt bike," we took the opportunity to think about what types of incidents we'd most likely find. The top three guesses (*based on too much previous experience with the category*) included "not wearing helmets/PPE," "unsafe speeds/lost control on terrain" and "new rider unfamiliar with vehicle operation." Unfortunately, we weren't disappointed. The following events highlight the many "creative" ways Sailors and Marines lost control of their off-road vehicles and how many broken parts and limbs they sustained.



- **Good News – Bad News.** A Sailor was riding on the back of a friend's ATV when he encountered the bane of any moving vehicle – a pothole. As this was a vehicle without a roof (or seatbelts), the Sailor was ejected from the vehicle and struck his head on the ground, knocking him unconscious temporarily. The report says "It is unknown if SVM was wearing any PPE" (*which we suspect translates to "didn't wear any"*). The good news? When he woke up, he initially remembered hitting the pothole and being ejected. The bad news? Shortly after waking up, the memory of the accident was gone, and he was incoherent and began acting differently. To make matters worse, his friends took him to spend the night at a friend's house instead of heading to a hospital. Fortunately, the friend's mother was a nurse, realized what was going on and took the Sailor to an emergency room where he was diagnosed and treated for a Traumatic Brain Injury (TBI). However, he still had to go through rehabilitation, care and assessment for four to six months while on limited duty followed by evaluation for partial disability. —*Bottom line, any time there's a loss of consciousness it's critical to get to a hospital to get checked out. There are too many ways head injuries can go wrong, so don't skip getting a professional medical opinion. And, apparently, we need to say it: Wear a helmet.*

- **You Picked a Fine Time to Leave Me "Loose Wheel"**. Another Sailor suffered a similarly spectacular dismount while riding with a friend on an ATV. After hitting a rut in the trail, the rear driver-side tire came off the rim, causing the driver to lose control. The ATV rolled over and the Sailor hit the ATV's roof due to a loose safety harness and suffered a broken jaw as a result. He wasn't wearing a helmet. All told, the Sailor spent about six weeks recovering between convalescent leave and on limited duty. —*The "unknown potential" for equipment failure makes using safety equipment effectively, such as snugging up the safety harnesses, that much more important. Take the extra few seconds to ensure your safety equipment will work as intended. Wearing a "full face" helmet—or ANY helmet—would have prevented the broken jaw.*

- **Bad News – Good News.** One Sailor discovered the importance of keeping your head on a swivel the hard way. While riding his dirt bike on private property a dog ran across his path. He overcorrected while trying to avoid the dog, which resulted in him being thrown from the bike. The bad news? Our Sailor landed on his right arm, causing two fractures—*ouch!* The good news? A family member immediately transported him to an emergency room where he underwent surgery. The 'gooder' news? He didn't break his skull because he had a helmet on. After eight screws, one plate and two days later, the Sailor spent the next eight weeks contemplating the benefits of becoming ambidextrous. —*Keeping your head on a swivel when operating any type of vehicle is key because you just never know what might be headed your way. Well done by this Sailor for wearing a helmet.*

- **Going Head-to-Head With a Dumpster.** We don't often read about trash dumpsters being involved in a Marine's operational objective, but that's what happened according to one of the mishap reports we

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reviewed. A Marine was riding an ATV in a neighborhood, lost control while rounding a turn covered in dirt and sand and crashed into a dumpster. There aren't a lot of details about how this face-off came to be (aerial assault aspects, frontal versus flanking maneuver, etc.), but it's safe to say the dumpster "won," laying our Marine up in the hospital for two days with a head injury and broken ribs. —*Key Lesson: He had a helmet on and it probably saved his life. Anytime foreign matter on the road surface adds a layer between your tires and the road, i.e., sand, gravel, grass, etc., treat it as if you're driving on ice. Ensure your speed aligns with your traction ability.*

- In Search Of ... A Marine and a friend were riding ATVs at the friend's family farm. The Marine and friend got separated on the trail, so the friend began back-tracking to look for him. Luckily the friend found the Marine, but unluckily, the friend found him on the ground... awake but injured. The Marine didn't remember any details of the event, but after the friend's father used his excellent sleuthing skills, they determined he must have collided with a tree – headfirst – while riding. He ended up with a skull fracture (the Marine, not the tree). —*Good job on the friend for doubling back to look for his riding partner. Discuss a plan beforehand and if you lose sight of each other, don't be shy about looking instead of just "assuming" they're okay and just took a detour. Head vs tree – see why helmets matter?*

- Get a Grip ... and Maintain It! A Sailor was riding an off-road motorcycle (a.k.a. dirt bike) at an outdoor dirt/motocross track and was approaching a ramp (PPE - check. Firm grasp on the equipment - not so much). The report isn't clear on how he lost his grip on the controls, but he did and, while airborne, was further separated from the bike, and ended up landing in the seated position. (Must not make "flying by the seat of their pants" reference. Must NOT make "flying by the seat of their pants" reference.) —*Not sure what the appropriate Risk Management is for two-wheeled vehicle aerial acrobatics, other than knowing and riding within your abilities and keeping the bike under control as much as possible.*

- Too Much "Swing" for the Shift. While we're talking about keeping "positive control" of your ATV/dirt bike, let's talk about keeping things rolling in the right direction. Seems a rather skilled Sailor was using his ATV to shuttle food during a unit activity to make the transition from the swing shift (4 p.m. to midnight) to mid-shift (midnight to 8 a.m.) easier for his crew to manage safely. Despite riding on a well-lit, well-traveled trek, he took a slightly different approach involving a hill on the last pass. The combination of a backward incline, failure to wear PPE (no helmet...why, oh why?!) and an unexplained loss of control led to a crash resulting in facial lacerations around the right eye (initial assessment by the ambulance crew) which escalated to three fractures of the right orbital socket (via ER's medical scanning equipment). Yikes! —*We commend the Sailor on the teamwork aspect of the mission, but for goodness sake, WEAR A HELMET! Learn from this Sailor's broken face that even skilled riders need head protection.*

Key Takeaways

Riding ATVs or dirt bikes off-road comes with challenges. We've said it before and it's worth repeating: Treat all off-road vehicles with the respect they deserve along with some healthy fear—you'll live longer. Below are tips to consider before jumping on your ATV:

1. **Sword and magic helmet.** How often did you just read, "was not wearing a helmet/PPE," then read about the wide variety (and number) of broken body parts? PPE (**especially helmets**) saves lives and reduces injuries. Isn't it better to need to buy a new helmet than spend your life in treatment for a TBI?
2. **Ride within your skill level and ability.** Most of us think we're above average drivers, but half of us are wrong. You're probably not as good as you think. If you aren't trained—and definitely if you aren't wearing a helmet—don't do that "I think I can do this" thing you're about to do. Get trained and put on your gear first.
3. **Always take the conditions and terrain into consideration.** As you read in our examples, sometimes the simplest thing like a bump, rut or pothole in the road can lead to unexpected equipment failures. As you ride, anticipate the unexpected and keep an eye out for road conditions ahead. Always keep your speed under control *just in case* road gremlins are looking for their next casualty. Ride like you want to be able to ride again tomorrow.

And remember. "Let's be careful out there."