

RIDE

**PLUS:
FAMOUS
CELEBRITIES &
THEIR BIKES**

**BUCKET
LIST:** best roads to
ride before
you kick it

10 Critical Pieces
of Body Armor

**MOST EXPENSIVE
BIKE EVER SOLD**

**IS AN
ELECTRIC
BIKE FOR
YOU?**

**POSER
VS.
PRO**

**WHICH ONE
ARE YOU?**



**Is this Your
Next Bike?**

Check Out the New
Kawasaki Ninja H2R Supercharged

**BEST OF
THE BEST ■ TOP 10 MOTORCYCLE RACERS**



RIDE

Summer 2015

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ANYMOUSE PROGRAM

The Anymouse program provides an outlet for safety concerns that have been submitted to the chain of command but remain unresolved. You can find the Anymouse icon on the main page of the Naval Safety Center Website

SOCIAL NETWORK

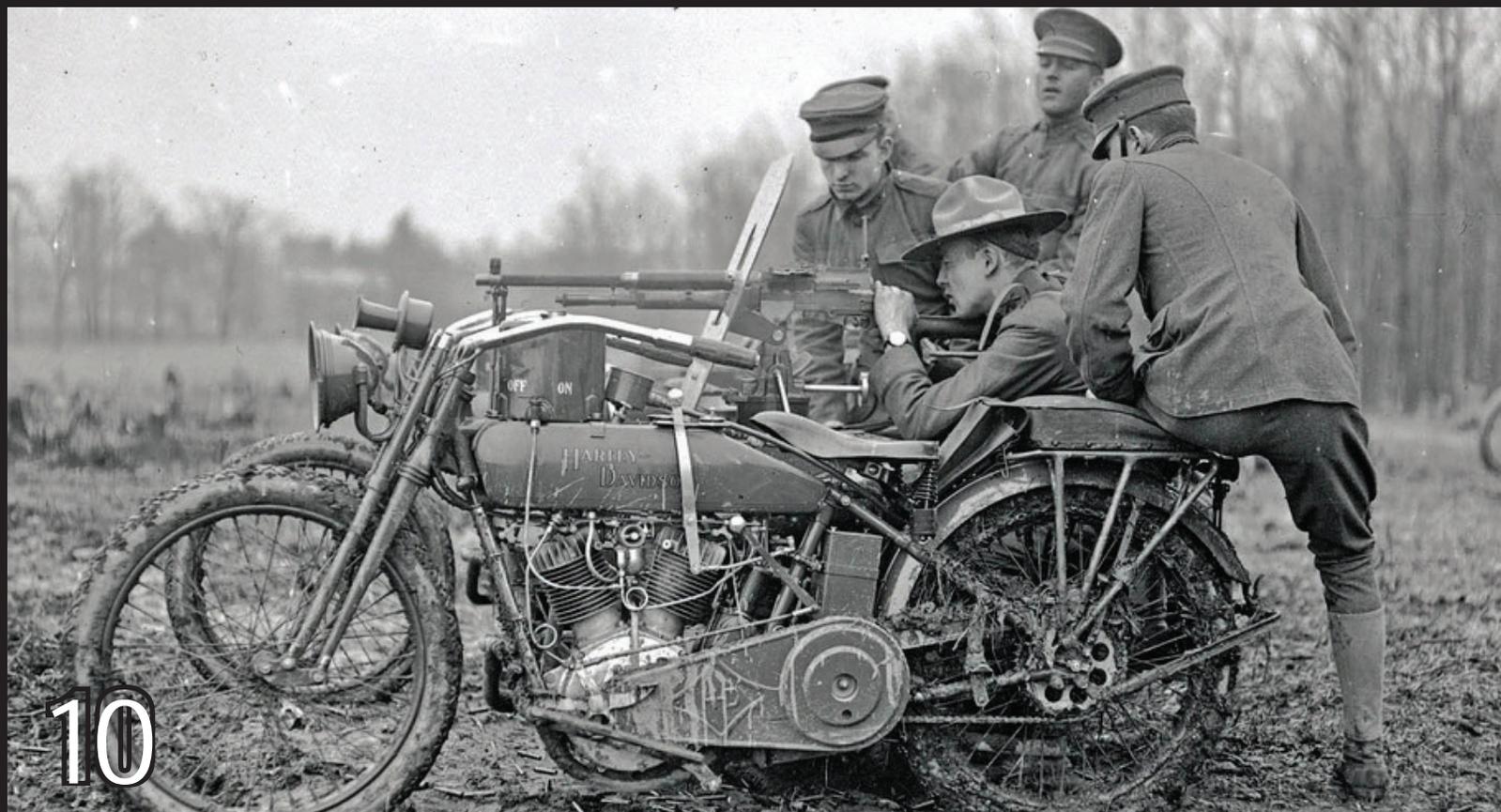
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Editor's Note:

In mid-April, I rode past a motorcycle accident involving a Sailor who'd lost control of his motorcycle when a vehicle swerved in front of him without warning. It shook me up a bit and for some time I wondered if there was anything he could have done differently? I wondered about the driver of the vehicle. Did he see the Sailor or was he so deep in thought about his day ahead that he didn't check his mirrors. I know each accident is different and some can't be avoided. However, motorcycle fatalities are on the rise and there's something that must be done to protect our riders.

In fiscal year 2014 the Navy tragically lost 20 Sailors in 294 motorcycle mishaps. The vast majority of those Sailors were males under the age of 30 who were riding sport bikes and who had less than two years of riding experience. So, when my boss came to me with the idea of doing a unique motorcycle safety magazine I was all for it.

While we can only control some of the factors that lead to dangers on the road, we can definitely control how well we protect ourselves when we travel. By doing something as simple as wearing a helmet, or using proper hand signals, we can limit our chances of accidents.

However, I know that's not what most of you want to hear. I get it. A magazine about motorcycle safety shouldn't be chock full of pages telling you "don't do this, and don't do that". Most people know they should be safe, but not all of them know how.

That's where Ride Magazine comes in. The goal with this magazine is to give you a fun way to get the information you need to be safe. As you flip through the pages, enjoy our list of best places to ride, but don't forget to look over the list of the safest helmets to use.

Check out the newest sport bikes of 2015 and find out how to use the proper hand signals while you're at it. I hope that by seeing all the options available to you it will encourage you to think about the best way to make it home safely.

Have fun reading the magazine and please send us your feedback on what you liked (or didn't like) about the magazine.

Be safe, ride far and have fun...

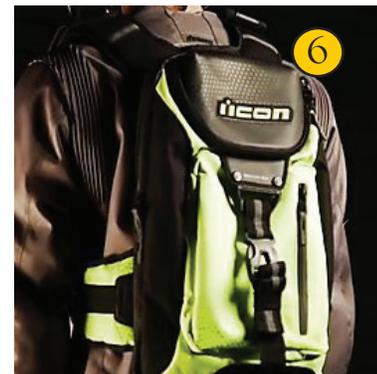
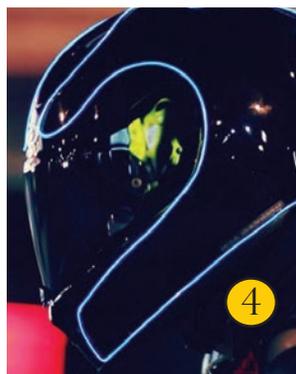
Nika Glover

Editor



THE IT LIST:

9 Products That Should Be on Your Wishlist



1. Kevlar Jeans

They look like a regular pair of jeans but are 10 times stronger. The reinforcements are barely noticeable and perfect for the rider who doesn't have time to change out of their gear. \$100, motorcyclesuperstore.com.

2. Protector Pro Street Motocross Jacket

Made of light weight yet durable stretchable Lycra/mesh net fabric and high impact injection molded plastic. Full zipper front closure. Adjustable straps throughout the arms and shoulders. Removable spine armor with tail protector. \$34.90, amazon.com.

3. iVUE 720P Crossfire Glasses

No longer do you need to mount a bulky sport camera on your head. Enjoy the thrill of slipping on these camera glasses to record your activities. The glasses feature increased durability, light weight frame, 1.8mm thick polarized lenses, and

weather resistant shell. \$110, amazon.com.

4. Light Mode Helmet Kit

Make sure they see you coming with your uniquely designed helmet lights. Each kit has every component ready for you to begin working on your own helmet. \$69-72, lightmodehelmets.com.

5. Wolfman Expedition Dry Duffel Bag

This 100 percent waterproof bag was designed specifically for motorcycle use. The fabric is made of 22oz vinyl for the body, 34oz for the sides and uses a waterproof webbing for the top opening to prevent water wicking into the bag. \$116 revzilla.com.

6. Icon Squad 3 Backpack

The Squad 3 Backpack has updated graphics, a laptop pocket, front closure system, reflective materials and Tri-Fit Closure System. \$100, revzilla.com.

7. Redverz Motorcycle Tent

Enjoy a road trip with a tent that shelters riders, motorbikes and gear in comfort, out of the elements and under one roof. \$450, redverz.com.

8. Sidi Crossfire Boots

These boots have a unique dual flex system, cam-lock buckle closure and fully replaceable soles, the Crossfire SRS is designed to give you the most comfortable and progressive riding experience possible. \$230-\$400, motorcycle-superstore.com.

9. Sena Bluetooth Headset

The headset comes with with long-range Bluetooth Intercom. Call hands-free listen to stereo music or GPS navigations. \$156, revzilla.com.

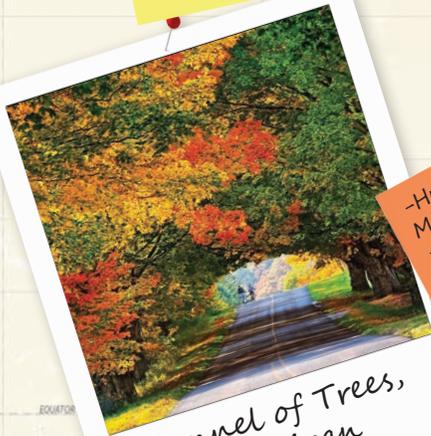
Editor's Note: The appearance of these nine motorcycle safety products does not constitute an endorsement by the Department of Defense, U.S. Navy or U.S. Marine Corps. They are representational of what is available on the commercial market and may contribute to a safer, more pleasurable riding experience. Body armor and smart riding accessories are always recommended.

Motorcyclist's Bucket List

12 roads you should ride before you kick the bucket.

- See the Blue Ridge and Great Smoky Mountains.
- No service trucks allowed.
- 45 mph speed limit.
- See civil war battle sites.

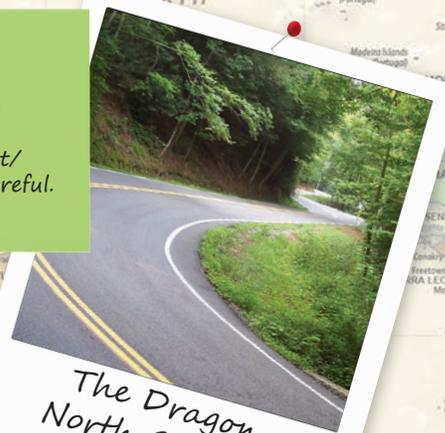
Blue Ridge Parkway, Virginia



Tunnel of Trees, Michigan

- Hug the Lake Michigan shoreline.
- Ride under trees that go for miles.
- Scenic summer cabin homes.
- Best seen in the fall.

- 318 curves.
- Borders the Great Smoky Mountains
- Many tourist/visit, so be careful.



The Dragon, North Carolina

- Limited guard rails; high elevation.
- Expect many bikes and cars.
- Rivers, mountains and dense forest.
- Multiple plunges like a rollercoaster.



Beartooth Pass, Wyoming

- Hugs the California coastline.
- See mountains and ocean at same time.
- Curves galore!
- Slow speeds.
- Don't go in summer. October is best.



Pacific Coast Hwy, California

- Large deep canyon.
- 1,450 miles long (roundtrip).
- Road is very rocky in places.
- Limited gas stations.



Cooper Canyon, Mexico

- Crosses man-made lake
- Pass through beautiful alpine landscape.
- Numerous curves.

Sylvenstein Bridge, Germany



- A.K.A Will Rogers Highway
- Most famous road in US
- More than 2,000 miles long
- See the American landscape change

Route 66, Nevada, Arizona



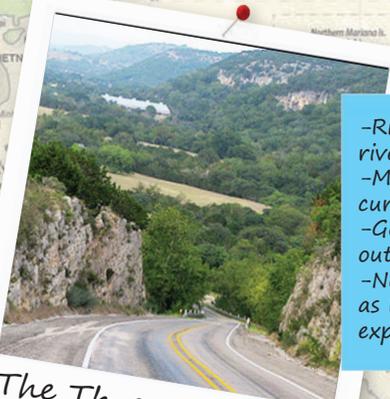
- Norwegian national tourist road
- Featured in films and commercials.
- Famous curved bridge.

Atlantic Ocean Road, Norway



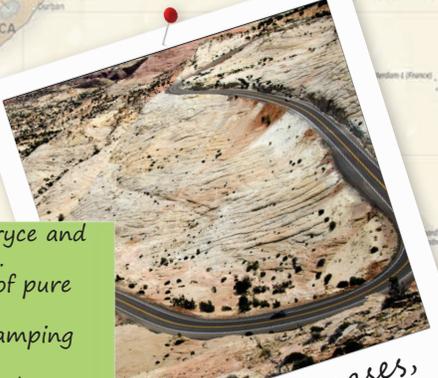
- Ride along clear rivers.
- Mountain-like curves.
- Go fishing but watch out for "gators"!
- Not the flat Texas landscape you're expecting.

The Three Sisters, Texas



- Between Bryce and Glen Canyon.
- 130 miles of pure joy.
- Plenty of camping spots.
- Travel in cooler evening air.
- Gas up, it's going to be a long curvy ride.

Grand Staircases, Utah



- Carved into mountainside.
- .75 miles long.
- Numerous curves.
- Only 16 feet high.
- Short but sweet.

Guoliang Tunnel Road, China





Mentorship Boosts Awareness

(Photo courtesy DVIDS)

By Stanley W. Jones

Motorcycle safety representatives (MSRs) and mentorship programs help commands improve hazard awareness and increase command commitment, thus helping riders boost confidence, improve skills, and prevent mishaps.

In 2009, the Navy saw a drop in motorcycle fatality rates, but the rates have been steadily climbing since. From fiscal years 2012 through 2014, the Navy lost 57 Sailors. Naval Safety Center data show that the average experience of these riders was less than three years. Inexperience, lack of training, poor situational awareness, and inaccurate decisions contributed to these fatalities. These deaths have had significant impact on Navy and Marine Corps readiness.

The Navy Traffic Safety Program (OPNAVINST 5100.12J) requires a command to have an MSR and a motorcycle mentorship program. Although designated as a collateral duty, the MSR position is critical to the success of a command's motorcycle safety program.

The MSR's Role

The MSR has a wide range of responsibilities, including administrator, record keeper, liaison, and program manager. Using the motorcycle module in the Enterprise Safety Applications Management System (ESAMS), the MSR maintains the training records and list of command riders. The MSR works very closely with the commanding officer and the safety officer to ensure that all riders acquire and maintain the required training for the type of motorcycle they ride.

Managing the command motorcycle mentorship program is

the MSR's biggest responsibility. In addition to scheduling mentorship meetings and non-formal motorcycle training, the MSR also identifies motorcycle riders and assigns mentors as needed.

Motorcycle Mentorship Program

The program helps riders maintain hazard awareness and avoid mishaps through continuing education and skills development. This program provides a means for riders to enhance their knowledge and skills through formal and informal instruction, mentorship and practical application exercises, and events. Each motorcycle rider is required to actively participate and support the objectives of the Navy's motorcycle safety program. Command involvement has great influence on the success of this program. The CO, safety officer, and MSR

must ensure that all personnel can get the assistance and training they need to be successful and safe as riders.

Get your experienced riders with your junior riders, whether it's during group outings or one-on-one rides. If you don't have enough riders in your command — or even if you do — partner with other commands so that you can provide the most experienced riders as mentors.

An example of a command directive delineating the process and responsibilities of the above may be found on the Naval Safety Center's website motorcycle page. Browse an extensive collection of downloadable tools and guidelines, such as an 11-chapter mentorship guide and mentorship program examples. For more information you can contact the Naval Safety Center Traffic Division at SAFE_Code42@navy.mil.

Mr. Jones is a traffic program analyst at the Naval Safety Center.

What You Need for a Motorcycle Mentorship Program

1. Complete list of riders and their experience level.
2. Exercises for the mentor to work with riders that target their particular needs.
3. Risk-assessment worksheet to provide information and feedback for the rider and the mentor on unnecessary risks that a rider may be assuming.
4. A formalized checklist for group rides approved by the commanding officer that provides information on who's going, what's required, where rides will take place, timeline, safety brief, mentors (a.k.a., ride captains), and route.
5. Get your "plan-to-own" riders involved early. Have them attend the motorcycle meetings where you discuss techniques for turns, riding in traffic, what to do at intersections, and other safe practices. Involving new riders will help them adopt the safe mindset early. This will also allow for discussing the type and size of motorcycle they will purchase. Many new riders are not ready for the motorcycles they buy (for example, a Ninja 259 vice a 1000RR sport bike). Ensure there are no artificial barriers to a member who wants to train and ride (for example, not allowed training until qualifications are completed). Far too many times this can drive a new rider "underground," and the command will not know about them until something happens.
6. Ensure operational risk management is incorporated into the program. Make ORM part of the overall command picture.



U.S. Service members and civilians prepare for a motorcycle safety course. The eight-hour course taught riders street performance maneuvers, safety procedures and group riding skills.

(U.S. Air Force photo by Airman 1st Class Harry Brexel)

The History of Military Motorcycles

By Aaron Cortez

Most of us are familiar with tanks, Humvees, and other land-based vehicles used in the military. Big, heavily-armored, and relatively slow, the typical vehicle used in combat operations puts protective armor and heavy firepower at a premium over speed and agility. But this makes perfect sense on the battlefield; when bullets and shrapnel can come from any direction, the sound of rounds bouncing off a few inches of steel would be pretty reassuring!

With that said, the motorcycle seems like a poor choice for combat. They have no armor, leave the operator totally exposed, can easily be damaged, and let's face it – they're dangerous even without the threat of the enemy present!

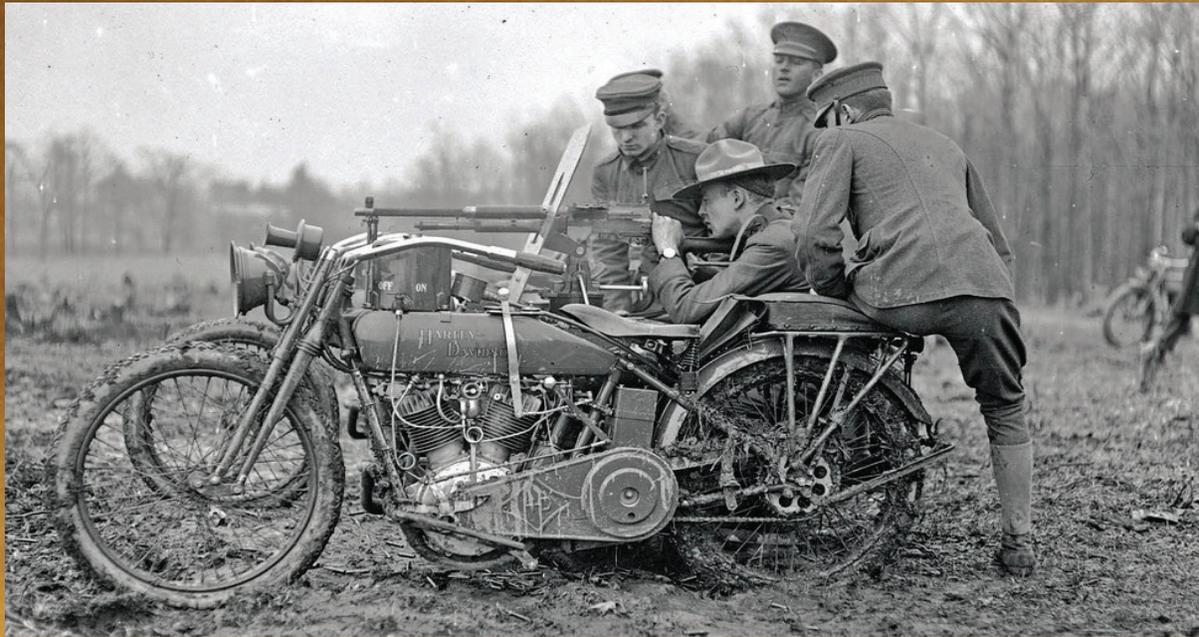


Photo Courtesy of Bike Bandit

U.S. Soldiers observe a machine gun mounted on a Harley-Davidson during World War I.

But even with all those limitations, there have been many times in combat where speed and agility is exactly what was needed. When it came to relaying a critical order, getting ammo to a machine gun, or scouting miles ahead of an advancing unit, the quick, nimble motorcycle was irreplaceable on the battlefield.

Unique roles like these are why motorcycles have retained roles in the military for over a hundred years. Motorcycling is a risky activity as it is, but combining that with the dangers of combat takes a whole other level of nerve - so this article recognizes those tough men who have ridden hard through shot and shell to secure victory, and the mean machines that got them there!

The Birth of the Military Motorcycle

The motorcycle first saw duty with the U.S. military in the borderland conflict between U.S. forces under General "Blackjack" Pershing and Mexican revolutionaries led by Pancho Villa. What became known as the "Border War" was a mainly cavalry-based counter-insurgency campaign across wide regions of the Southwest, and motorcycles



Photo Courtesy of Bike Bandit

A U.S. Soldier rides a WLA motorcycle while wearing a gas mask. They were often required to ride with mask in case of a biological or chemical attack.

Military Motorcycles

provided to the Army by Harley-Davidson gave the U.S. an advantage against the horse-mounted Mexican revolutionaries.

While these gas-powered steeds ultimately didn't help the U.S. bring Villa to justice, they served as an



Photo Courtesy of Bike Bandit

U.S. Soldiers on motorcycles earned the nickname "The Liberator" after they were often seen leading convoys.

experimental platform for military bikes, introducing innovations such as a machine-gun mounted on a sidecar (see photo.) The Army was pleased with their new Harleys, and would place another delivery a short time later - for a much bigger war.

World War I

The motorcycle first saw large-scale deployment in WWI. While commonly associated with stagnant, immobile trench warfare, it is often forgotten that motorcycles were actually one of the most prolific tools in the Allied arsenal (the U.S. alone ordered over 80,000: 50,000 Indians, 20,000 Harley-Davidsons, and various others.)

Entire infantry units were mobilized on motorcycles, and they also provided an ideal way to rapidly deploy machine gun crews into position. Medical units used them to evacuate wounded on stretcher-equipped sidecars, and to return medical supplies and ammunition to the front lines. They were also used for reconnaissance and for doing perim-

eter security patrols (a concept the Army is currently revisiting using motorcycles for again, nearly a hundred years later.)

But where motorcycles proved the most valuable was for delivering messages. Because electronic communication at the time was unsecure and prone to being damaged, using "dispatch riders" was the most effective way to deliver orders, reports, and maps between units. It was not uncommon for mounted messengers to ride through machine gun and artillery fire, far behind enemy lines, and over or around craters, debris, and dead bodies.

World War II

While WWII is often said to be the heyday of the military motorcycle, it actually played a much reduced role compared to the direct combat operations they saw in WWI, due to the predominance of mobile armor in use by the 1940s. Where motorcycles really found their stride in the European theater was again as the transportation choice of messengers, helping to close the wide distances between mobile forward units.



Photo Courtesy of Bike Bandit

A post-war army surplus yard; these bikes found new life as "choppers," and started a cultural movement.

But as prolific as the WLA was, the Allies soon discovered how far their Harleys were behind tech-



Photo Courtesy of Bike Bandit

U.S. Soldiers and Marines work as scouts in a convoy in Operation Desert Storm. While motorcycles were produced in large quantities during earlier wars, the more recent wars saw small production of motorcycles. However, these vehicles did prove to be a good method for avoiding IEDs during convoys.

from the BMW design, resulting in the XA - a superior machine to any American motorcycles manufactured at the time.

Astonishingly similar looking to the BMW R71, its sealed shaft drive and telescoping forks were well-suited to condition in the North African theater, where the Army demanded a bike that could withstand the dust and grit that constantly invaded vehicle components. However by the time of their release, the Jeep had become the quick transport vehicle of choice by the military, and the XA's were never even deployed.



Photo Courtesy of Bike Bandit

The Rotax-powered, Harley-Davidson built NATO enduro, the MT350/MT500, built between 1987 and 1993.

So what happened to all those awesome war Harleys? The story goes that huge numbers of demobilized troops, enamored with the bikes they saw in theater, bought cheap military surplus WLAs after returning home. Of course, all those awkward looking racks, bags, and windshields were no longer necessary and were chopped off the bikes, giving birth to the term "chopper," and the eventual rise of biker culture in the 1950s. Because so many WLAs were shipped to our Soviet allies as a part of the war effort, to this day Russia remains a source of thousands of original WLA parts for American restorations!

Post-War Era

Despite deploying tens of thousands of them in the two world wars, the motorcycle would never again see widespread use in the military after 1945. Advances in communication technology made the use of motorcycles to relay messages obsolete, and the types of terrains our armed forces have fought in since WWII, along with the risk involved to the

individual soldier, has resulted in them having very reduced role.

Motorcycles did see limited action in Vietnam, used by Army Cavalry and Marine Recon units to scout territory and lead convoys, and had a similar role in Desert Storm. Some interesting post-war examples built for military use include the "military Sportser," the XLA, of which only around 400 were built, and the MT500 and MT350, rugged Rotax-engine powered Enduro bikes built by Harley-Davidson for NATO (primarily UK) forces. In addition, many units in combat have "adapted and overcome," to borrow Marine Corps vernacular, by acquiring motorcycles from various foreign manufacturers while in theater.

But while the two-wheeled war machine will never again see five-digit production numbers, there has been a resurgence of the motorcycles use in military operations during the Iraq and Afghanistan campaigns. The U.S. military has recently been contracting some remarkable military motorcycles for use in special operations, such as the near-silent, blacked out electric Zero MMX, the innovative all-wheel drive Christini AWD 450, along with the trusted Hayes M1030, that gets 100mpg on diesel and runs on six other types of fuel.

So while conventional forces have built their war doctrines around large numbers, heavy armor and overwhelming firepower, the special operations community has proven more eager to adopt unconventional tools like the motorcycle for use in their unique combat missions.

The military, just as warfare itself, has undergone many radical changes over the last century. But as the asymmetric nature of modern war has shown us, the quick and agile soldier on two wheels will continue to have a place on the battlefield - wherever that might be.

Aaron Cortez is a writer with the blog Bike Bandit.com. To see more of Cortez's work, visit <http://www.bikebandit.com>.



Photo Courtesy of Bike Bandit

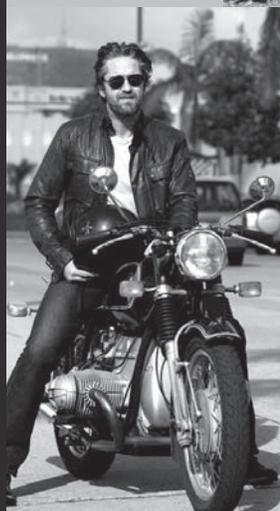
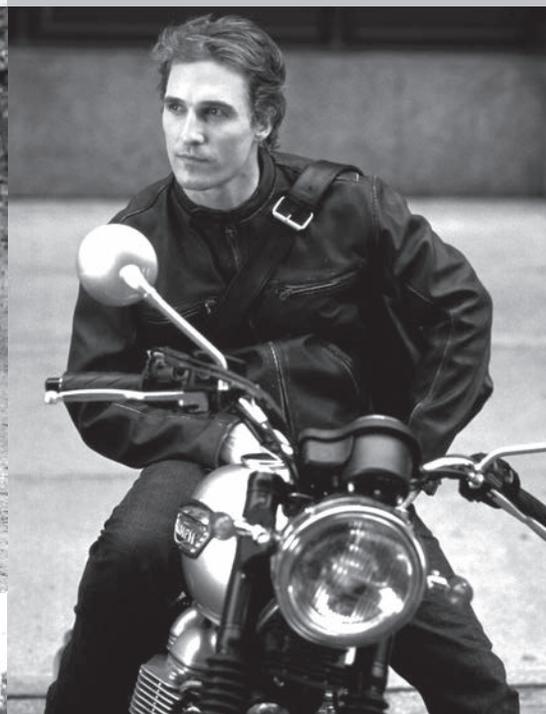
U.S. Marines use dirtbikes to pursue Taliban in Afghanistan, 2012. **Editors Note:** The faces of the Marines have been blurred for security reasons.

Celebrities who Ride in Style

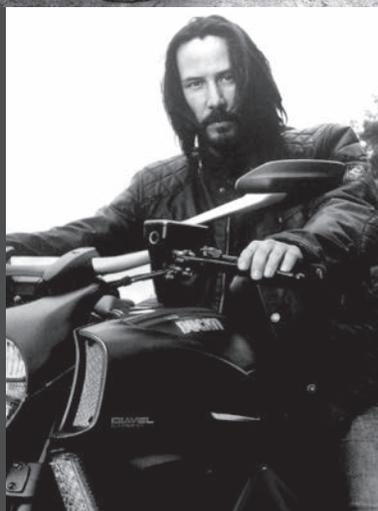


LEFT: Hugh Jackman is best known for his role in X-Men. He loves his Harley so much that he rides it to movie premieres.
BOTTOM RIGHT: Matthew McConaughey is an award winning actor who rides a vintage Triumph motorcycle.

David Beckham loves soccer. But his love of motorcycle riding is just as great. Beckham is often seen riding around Los Angeles on his bike. He once held up traffic when his Triumph Bonneville T100 stalled.

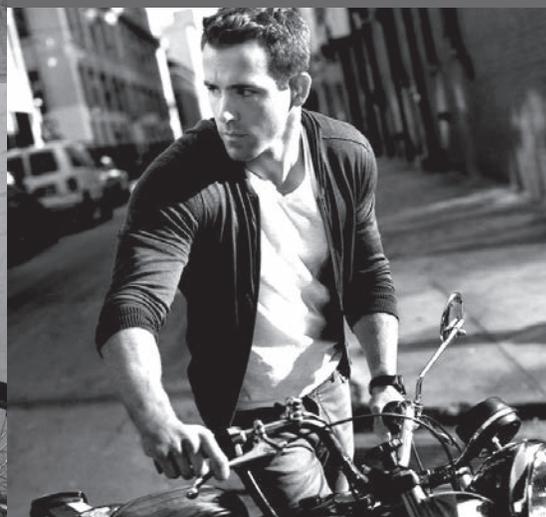


LEFT: Gerard Butler is well-known for his movie 300. When he's not acting, he's riding his Ducati. One of his favorite pieces of clothing is a Matchless motorcycle jacket.



LEFT: Keanu Reeves was once against wearing motorcycle helmets but later changed his stance after experiencing a minor accident.
BOTTOM RIGHT: Actor, Ryan Reynolds is part of a subculture of rugged riders. Reynolds owns a Ducati but recently purchased a custom 1964 Triumph 650 called the "9 O'Clock Gun".

RIGHT: Pink is well known for her tomboy style and tough girl attitude. But the singer and actress is also an avid motorcyclist. Pink rides her Harley with the same passions that she sings with. After becoming the mother of a little girl she became outspoken about the importance of wearing a helmet.



Greet Other Bikers but Don't Wave Like an Idiot

Photo Courtesy Wikimedia

One of the coolest things about riding a motorcycle has to be the wave. It's like a silent way to show solidarity with people you've never met and don't know, yet you share a common bond. The wave says we're a part of something and are acknowledging each other's love for riding.

While something as simple as a hand gesture may seem irrelevant to the average motorist, to a motorcycle rider it's a rolling connection to a brother and sisterhood. Most riders know if they don't get it right, they'll look like a poser instead of an experienced rider.

Here are a few guidelines to the wave that will keep you from looking like an idiot on a bike.

1. Low Left-Handed Wave: This is also known as the Harley/cruiser wave and is mostly used by people who ride them. Extend your arm fully down toward the left with anything from one to five fingers extended. Your palm must face the other rider or the road. Most people use a peace symbol while doing this wave as a sign of respect.

2. Straight Out Left-Handed Wave: Most bikers who ride crotch rockets prefer this wave. It's fairly simple. Fully or partially extend the arm out to your left and face the palm in a relaxed state toward the oncoming rider. If you fully flatten your hand you'll look like a big kid waving. Keep it relaxed and simple.

3. High Left-Handed Wave: It's just as it sounds. Hold your hand high and to the left with your palm relaxed and faced toward the rider. Your elbow should be at nearly an 85 degree angle and slightly lower than shoulder height. Again, if you want to look like a dork, fully flatten the palm and wave it quickly about like you have no sense. If that's not the look you're going for, just chill out and relax the palm.

4. Right-Handed Wave: This is the best option when you have your cruise control on. Obviously

if you're riding a sport bike, this is not a good idea, unless you want to be thrown from your bike like a rag doll. This wave is the same wave you'd give if you were walking on a street. It's known for being used by people riding a Ultra Classic or Goldwing and not generally acceptable.

5. Forward Left-Handed Wave: If you happen to own a crotch rocket because of the unique physical position those riders are in. This wave is quick and tough to catch if you're the other rider. To execute this wave, simply slightly raise your left hand from the grip show your palm and return the hand to the grip in under four seconds.

6. The Head Nod: This one gets honorable mention for those who just don't feel like lifting a finger. It's a subtle quick forward head motion that tells the other rider "Hey I see you, enjoy your ride".

Whatever method you chose to use just remember that it's an acknowledgement and show of solidarity. Don't feel rejected if someone doesn't return the favor. They might not see you or could be so deep in thought with their own joy of riding that they completely miss the gesture. Either way, you showed your respect and that's all that really matters.

Two Riders One Bike

If you don't know what a pillion is, you should probably pick up a basic guide to motorcycle riding and don't you dare get on a bike until you do.

For those of you who do know what it is, you may not fully understand how to properly ride with a passenger on your bike.

Follow these short guidelines to ensure you and your passenger enjoy the ride.

1. Smooth your gear transitions. The trick to making a smoother switch from one gear to the other is to close the throttle just a bit, and at the same time pull the clutch immediately then switch gears immediately. After that, loosen the clutch and set the throttle back into place.

2. Watch your braking and don't toss your passenger. When you brake hard it bounces your pillion into an uncomfortable position. Limit your braking and if you must brake, do it far in advance to prevent yourself from jerking your pillion forward.

3. Use your throttle wisely. When you accelerate aggressively, your pillion might react skittishly and grab you unexpectedly because they may feel as if they're going to slide backward off the bike. If you don't want to get scars from scratches, take it easy on the throttle so your pillion will relax

through the next pull-off.

4. Instruct your pillion to sit on the bike, not climb onto it. When your pillion is getting onto the bike, have them keep their left foot onto the ground and swing forward into a sitting place on the bike. It will feel awkward at first, so they can use their hands to make the motion smoother.

5. Have the pillion sit closer to the back. While it may feel slightly uncomfortable, it's best if the pillion moves their butt further back to evenly distribute the weight on the bike.

6. Ensure your pillion takes the corners as smoothly as you. When you're riding, let the pillion know to move in sync with you. That means when you lean, the pillion leans. If they sit stiffly against you as you take a curve, it could cause the bike to wobble a bit and in some cases cause an accident.

7. When you stop, ensure your pillion keeps their feet on the pegs. This makes it easier for you to keep the motorcycle balanced. When you are both getting off, have the pillion wait until you say it's okay to get off.

8. Don't ride a person who isn't wearing proper gear. Just as you want to ride safely with the right gear, you should want the same for your passenger.

To carry a pillion passenger in the United States or United Kingdom, one must hold a full license for the vehicle and there must also be a proper seat and foot pegs for the passenger. A motorcyclist is not allowed to carry more passengers than the bike was designed for.

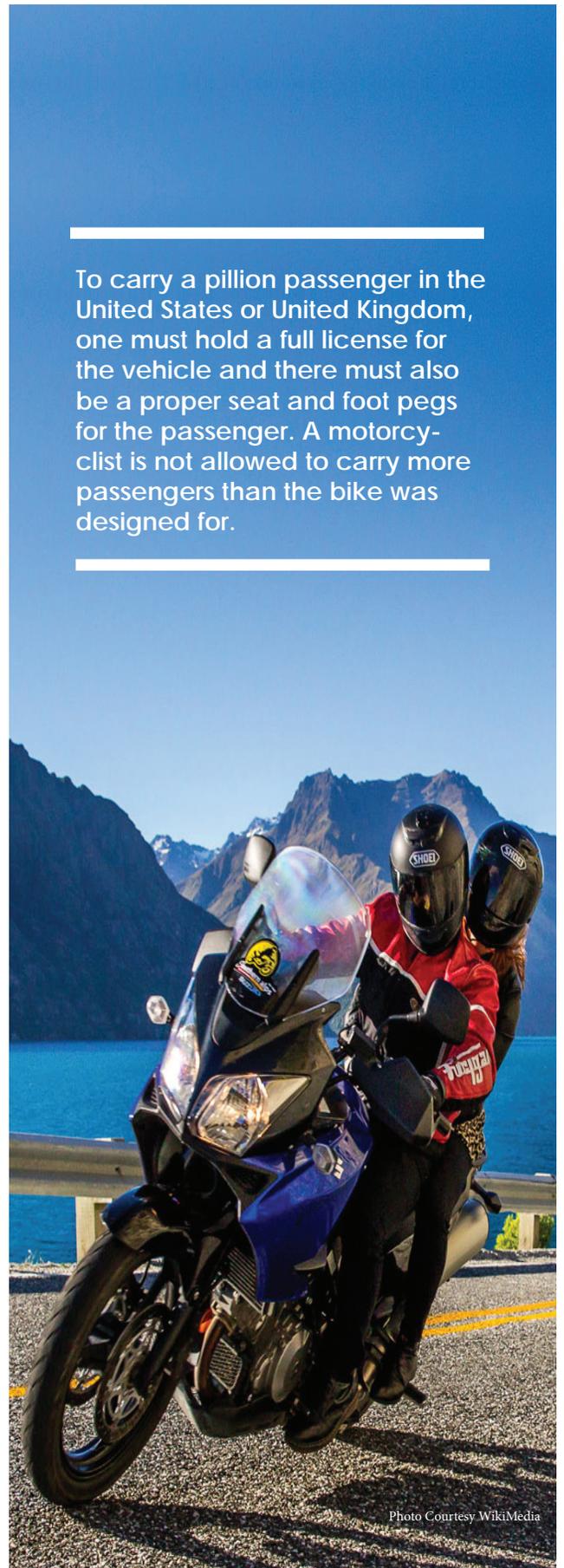


Photo Courtesy: Wikimedia

12 Rules for Group Riding



Photo by ABH2 (AW/SW) Latina Dobbins

U.S. Service members and civilians with VAW-120 prepare for a group ride May 21, 2015 to Yorktown, Virginia. They organized the ride details prior to their trip to ensure everyone understood what was expected of them on the ride.



Photo by ABH2 (AW/SW) Latina Dobbins

Members of VAW-120 conduct a group ride May 21, 2015. They are rode in proper group format with each rider staggering the other in the same lane two bikes behind. This formation not only allows the riders to see what's going on ahead of them, it also saves space so motorist aren't stuck behind a long group of motorcycles.



Photo by ABH2 (AW/SW) Latina Dobbins

Members of VAW-120 pose for a photo after a group ride May 21, 2015.

Recently, motorcycle analysts at the Naval Safety Center determined that group riding posed greater risks to riders if the group they rode with took more risks. Like the old saying goes, "birds of a feather flock together," and motorcycle peer pressure occurs even into adulthood. Bikers should be intelligent enough to know when they should and shouldn't follow the group.

Just think of the example most of your mothers used when trying to get you back on track in your youth. You wouldn't jump off a building if your friend did it, would you? So don't jump into stupid behavior just because you're riding with a group that decides not to follow the rules.

You might get a smirk or two from someone implying you're not cool, but this isn't high school and their opinion shouldn't cost you your life.

Every experienced biker knows there's rules to riding especially when it comes to riding with a group. These 12 rules are the best to keep in mind.

1. Organize the ride or suggest an organized plan be put into place before you ever take to the road.

2. Remember that you're not surrendering any decision-making in regards to your personal safety. Don't do anything you're not comfortable doing.

3. Ensure every rider understands the hand signals so you will have no issues communicating.

4. Put the most experienced riders at the lead, then the most inexperienced riders directly behind them toward the front so that the group leader can adjust the group to their pace.

5. To keep the group together, go at the pace of the least experienced rider.

6. If the group is riding too fast, inform the sweep rider that you'll be dropping out then ride at a pace that is comfortable for you.

7. Establish a two-to-three-second cushion in the front and back of each rider. Try not to do a side by side formation because this can be uncomfortable for new riders and it limits the space of each riders cushion.

8. If you approach sharp turns instruct the group to head back into a single file position to avoid moving into another lane. Also use single file when entering and exiting the highway.

9. The formation should tighten up when at stops. The bikes on the left take the lead when the light turns green.

10. Don't block intersections.

11. When parking, get off the road as fast as you can. Don't park in a location where there's not enough parking for the entire group.

12. If a member of the group happens to have a trike or sidecar, tell them to remain at the center of the lane similar to a car.

Motorcycle Hand Signals



Left turn
Arm and hand extending left, palm facing down.



Right turn
Arm out, bent at 90° angle, fist clenched.



Stop
Arm extended straight down, palm facing back.



Speed up
Arm extended straight down, palm facing up, swing forward.



Slow down
Arm extended straight out, palm facing down, swing down to your side.



Follow me
Arm extended straight up from shoulder, palm forward.



You lead/come
Arm extended upward 45°, palm forward pointing with index finger, swing in arc from back to front.



Hazard in roadway
On the left, point with left hand; on the right, point with right foot.



Single file
Arm and index finger extended straight up.



Double file
Arm with index and middle finger extended straight up.



Comfort stop
Forearm extended, fist clenched with short up and down motion.



Refreshment stop
Finger closed, thumb to mouth.



Turn signal on
Open and close hand with fingers and thumb extended.



Pull off
Arm positioned as for right turn, forearm toward shoulder.



Police ahead
Tap on top of helmet with open palm down.



Fuel
Arm out to side pointing to tank with finger extended.

Top 10 Motorcycle Racers of All Time

The Grand Prix motorcycle racing is well known as the premier racing event for motorcyclist. The championship started in 1949 and continues today with the sport rising in popularity each year. In the beginning, there were four classes: 500cc, 350cc, 250cc and 125cc. Then in 1962 the 50cc was introduced and limited to single cylinder bikes. In 1982 the 350cc was discontinued and the 50cc was replaced with the 80cc. Today the races have all new classes, with the MotoGP class replacing the 500cc and the Moto2 replacing the 250cc.

Since the sport began, only 52 people have earned high enough scores to be considered the best of the best with only one out of the top ten winning in today's races. While it's not clear if that's due to a change in rules or safer behavior by current racers, the list is still impressive. These riders know how to stay safe.

1. Giacomo Agostini

An Italian multi-time world champion Grand Prix motorcycle road racer. Agostini, nicknamed Ago, has an absolute record of 122 Grand Prix wins and 15 World Championships titles, he is claimed to be the greatest motorcycle racer

of all time. He had 68 wins and 8 titles, in the 500cc class, the rest were in the 350cc class.

2. Ángel Nieto

He is one of the most successful motorcycle racers of all time, with 13 Grand Prix World Championships to his name. He specialized in racing small displacement bikes such as in the 50 cc, 80 cc

3. Valentino Rossi

Rossi is an Italian professional motorcycle racer and multiple MotoGP World Champion, who is one of the most successful motorcycle racers since the start of the event. Many also consider

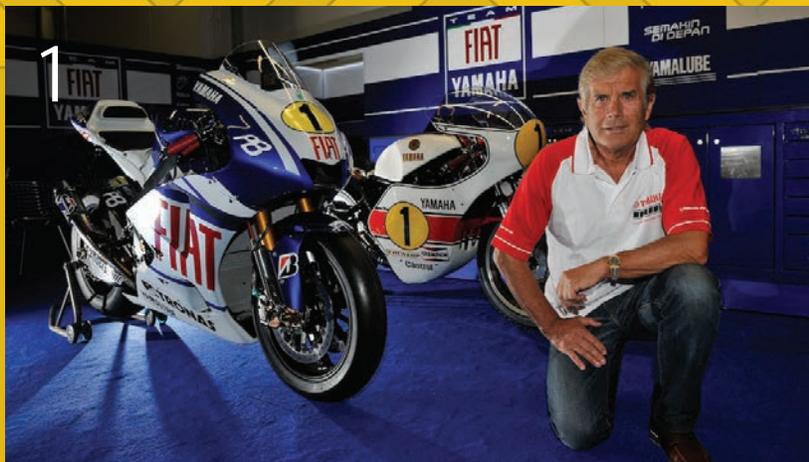
and 125 cc classes. He retired in 1986 at the age of 39 with a total of 90 Grand Prix victories and 13 World Championships.

him the greatest motorcycling rider of all time, with nine Grand Prix World Championships to his name – seven of which are in the premier class.

4. Mike Hailwood

Hailwood was a British Grand Prix motorcycle road racer regarded by many as one of the greatest racers of all time.

Hailwood was known as "Mike the Bike" because of his natural riding ability on bikes with a range of engine capacities. Later in his career he went on to compete in Formula One and other classes of car racing, becoming one of the few men to compete at Grand Prix level in both motorcycle and car racing. He died following a road traffic accident





in Warwickshire, England.

5. Carlo Ubbiali

Ubbiali is an Italian nine-time World Champion motorcycle road racer. In the 1950s, he was a dominant force in the smaller classes of Grand Prix motorcycle racing. Ubbiali was also a five-time winner at the prestigious Isle of Man TT.

6. John Surtees

Surtees is a British former Grand Prix motorcycle road racer and Formula One driver. He was a four-time 500cc motorcycle World Champion – winning that title in 1956, 1958, 1959 and 1960 – the Formula One World Champion in 1964, and remains the only person to have won World Championships on both two and four wheels. He founded the Surtees Racing Organization team that competed as a constructor in Formula One, Formula 2 and

Formula 5000 from 1970 to 1978. He is also the ambassador of the Racing Steps Foundation.

7. Phil Read

Reed is an English former Grand Prix motorcycle road racer nicknamed “The Prince of Speed.” and Spedy Read. He became the first man to win world championships in the 125 cc, 250 cc and 500 cc classes.

8. Geoff Duke

Duke was a British multiple motorcycle Grand Prix road racing world champion. Duke was the most famous rider to adopt one-piece leathers - he had enlisted his local tailor to make the first of his now famous one-piece race suits. He was named Sportsman of the Year in 1951.

9. Jim Redman

Redman is a six-time World Champion motorcycle road rac-

er. He would go on to claim four consecutive 350cc World Championships from 1962 to 1965. In 1962 and 1963 he claimed double championships winning both the 250cc and 350cc World Championships. In 1964, he became the first rider in history to claim 3 Grand Prix victories in one day.

10. Mick Doohan

Doohan is a former Grand Prix motorcycle road racing World Champion, who won five consecutive 500 cc World Championships. Doohan competed successfully throughout the early 1990s and appeared to be on his way to winning his first world championship when he was seriously injured in a practice crash before the 1992 Dutch TT. He recovered but it never healed 100 percent. However, he went on to win his first 500cc World Championship in 1994.

MOTORCYCLE SAFETY TIPS



1 ALWAYS WEAR A HELMET
Choose a helmet that displays the DOT label which indicates that it meets federal safety standards.

2 KNOW YOUR LIMITS
Your motorcycle has limits. Know them.

3 WATCH SPEED
Follow posted speed limits.

4 KEEP YOUR DISTANCE
No one likes a tailgater. Keep a safe distance between your bike and other vehicles.

5 SIGNAL
Use your signals.

6 USE BOTH BRAKES
When braking use both brakes at the same time by applying them slow and steady.

7 BE SEEN
Avoid blind spots and always use your headlights day or night.

How BMW Became a Brand

By Nika Glover

One of the first things that graphic design students learn in college is how to create a logo, which represents the brand of a company.

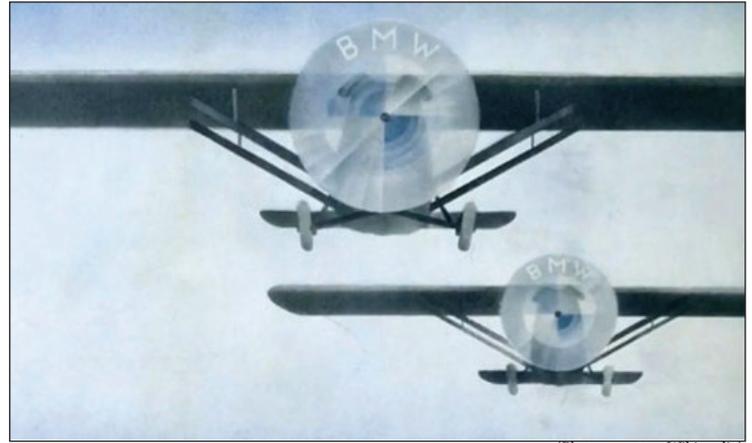
A logo is the feel and visual representation of an organization. A great logo has staying power, and it's always fascinating to learn how a company's logo evolved into the brand they have today.

In the case of BMW, the company's logo is shrouded in mystery and myth. One quick internet search and you'll find multiple stories about its origins. Initially, it was said that BMW's logo was based on a rotating propeller. In fact, on the 1929 cover of

BMW Magazine, there's an image of two aircraft with what appears to be the logo inside the propellers. So it makes perfect sense that people would think that's where it came from.

However, as BMW expanded from aircraft to motorcycles to cars, they acquired the aircraft engine maker Rapp and decided to combine both companies' logos. They also decided to include a piece of the Bavarian national flag colors as a symbol. The two combined to make the BMW logo what it is today.

While some might say the aircraft myth is far more interesting, neither fact nor fiction can take away from the great products that BMW produces today.



(Photos courtesy Wikimedia)

TOP and BOTTOM: In 1929, this image appeared on the cover of *BMW Magazine*. It has been said that the company's logo was inspired by this image of the rotating propellers. While this would make sense, it's not the case at all. The logo is actually a combination of the BMW company and RAPP, the company's aircraft engine maker. Then to add in some color the artist used inspiration from the Bavarian national flag. These three things combined make up the brand that is recognized everywhere.



TIDBITS

Did You Know Which Motorcycle Was the Most Expensive Bike Sold?

It didn't quite make it to a million dollars, but in March of 2015 the beautiful 111 mph (179 km/h) bevel-driven OHC V-twin 1915 Cyclone Board Track Racer was the star of the E.J. Cole Collection, attracting the highest genuine bid ever for a motorcycle at auction. It went at a hammer price of \$775,000 which ultimately translated to the bike fetching \$852,500 including buyer's premium of 10 percent.

Only 13 Cyclones are known to exist, and this one was owned by actor Steve McQueen who was a motorcycle enthusiast.



1915 Cyclone Board Track Racer was sold for more than \$800,000 at the E.J. Cole Collection auction.

2015'S BEST SPORTBIKES

Sportbikes offer the most advanced motorcycle design technology available and are designed for optimum speed, acceleration, braking and maneuverability.

They have a more aerodynamic design than other classes of bikes and are a thrill to ride for experienced motorcyclists, especially in high-performance situations such as a track day down at your local racetrack.

However, comfort and amenities usually suffer at an inverse proportion to how quick they are around a racetrack. Either way, if you're into the speed and agility that comes with a sport bike, you'll enjoy this list of the top sport bikes of 2015.

Editor's Note: *As with all motorcycles, quality body armor is required to ride these 10 bikes. The appearance of these bikes do not constitute an endorsement by the Department of Defense, U.S. Navy or U.S. Marine Corps.*



Honda CBR 300R

The Honda CBR300R features first class ergonomics, and plenty of modern technologies. Its full-cowl Supersport style is combined with dual headlights and a low 30.7-inch seat. The bike features an agile handling and a potent 286 cc, liquid-cooled single-cylinder, four-stroke, DOHC engine with PGM-FI. The engine's power is transferred to the ground by means of a six-speed transmission. The motorcycle is available in Black, Red, Pearl White/Red/Blue, Matte Black Metallic/Yellow at a base price of \$4,399.

Kawasaki Ninja 300

The new Ninja 300 is sporty, fast and technologically advanced. For 2015, the Kawasaki Ninja 300 ABS receives a set of new colors, fresh graphics and a pair of new Dunlop tires. Power comes from a 296 cc, four stroke, liquid cooled, DOHC, parallel twin engine which is mated on a six-speed transmission with positive neutral finder. You also get Digital Fuel Injection, an FCC clutch with assist and slipper functions as well as an ABS braking system. The Kawasaki Ninja 300 ABS is offered with a base price of \$5,299.



Harley-Davidson V-Rod V-Rod Muscle

Back in 2001, Harley-Davidson introduced its VRSC "V-Rod" to the motorcycle world to compete with both imported and domestic (U.S.) muscle bikes. The factory teamed up with Porsche to design the aptly-named "Revolution" engine to power this new drag bike, and the evolution of the "Revolution" has continued ever since. This drag bike maintains the design concepts of the original VRSC, with the subtle improvements. This model can be yours for \$16,149-\$16,999.

Kawasaki Ninja 650 ABS

The Ninja 650 ABS is fitted with the latest technologies. It is propelled by a 649 cc, four stroke, liquid cooled, DOHC, four-valve, parallel twin, liquid cooled engine with a displacement of 649 cc. The engine is fueled by a 4.2 gallons fuel tank and its power is transferred to the ground by means of a six speed transmission. The bike is also equipped with ABS brakes, Digital Fuel Injection, double-pipe perimeter frame and analog and digital instrumentation. The motorcycle is offered with a starting price of \$7,599.





Kawasaki Ninja ZX-14R ABS 30th Anniversary

Meet the new Kawasaki Ninja ZX-14R ABS 30th Anniversary that was especially designed to mark 30 years since the birth of one of the most iconic models built by the Japanese manufacturer. The special edition features an intense Firecracker Red and Metallic Graystone paint job with narrow Gold pinstriping and gold brake calipers. Other notable features include a unique numbered badge on the gas tank, ABS, Traction Control, adjustable suspension and a 1441cc inline four-cylinder engine with selectable Power Modes. This bike can be yours for no less than \$15,899.

KTM Super Duke 1290 R ABS

In the form of the KTM 1290 Super Duke has crowned its legendary Naked Bike model range with a machine that redefines the term 'Streetfighter'. Pure riding pleasure is pre-programmed - from the racetrack to the city and everywhere in between. The new Super Duke has a high-tech aggressive design with unprecedented functionality and razor-sharp sportiness reduced to the essentials. The new KTM 1290 SUPER DUKE R transforms optimum performance with maximum safety into ultimate riding pleasure.



Suzuki GSX-R 600

The Suzuki GSX-R600 is built around a race-proven 599 cc, 4-cylinder, and liquid-cooled engine which is combined with a lightweight chassis, a compact wheelbase and race-developed suspensions. The motorcycle is also equipped with a 4-into-1 stainless-steel exhaust system with a titanium muffler. The Suzuki GSX-R600 features three-way adjustable footpegs, an adjustable shift lever, and a short fuel tank. As far as prices are concerned, the Suzuki GSX-R600 can be yours for no less than \$11,199.

Suzuki Hayabusa 1340

Suzuki Hayabusa 2015 model year features fresh radial-mount Brembo Monobloc front brake calipers which are lighter and more rigid than conventional bolt-together calipers. The piston diameter was enlarged from 32-30mm to 32-32mm, thus significantly improving the stopping power. The motorcycle weighs 266 kg and at its heart sits a 4-stroke, liquid-cooled, 4-cylinder, DOHC engine with a displacement of 1340cc. The engine's power is transferred to the rear wheel by means of a 6-Speed, Constant Mesh transmission. The base price is \$14,599



Triumph Daytona 675R ABS

Great for the road, but better for the track, the Triumph Daytona 675 and 675R supersports motorcycles are precision instruments. It comes with more power, lighter weight and is easier to ride than the previous version. It contains an equal blend of torque, responsiveness, agility, poise and purpose. This bike is full of class-defining power, performance and handling. The engine is brand new featuring twin injectors per cylinder, titanium valves, a 14,400 red line, and a spine tingling induction roar. It's faster on the track, better on the road and even more satisfying to own.

Yamaha YZF R6

One ride on the R6 lets you know that this bike was born on the racetrack. Its MotoGP-bred technology is tuned to give you the kind of outstanding engine and chassis performance usually reserved for professional riders. Its ultra-high-revving short-stroke engine unleashes dazzling power, made even more responsive by the state-of-the-art YCC-I (Yamaha Chip Controlled-Intake) and YCC-T (Yamaha Chip Controlled-Throttle). Everything about the R6 is geared towards ultimate cornering, and getting rider and machine working as one.



Poser or Pro?

Which are You?

HEAD – That beanie helmet probably isn't legal and won't protect your head. You only have one brain so why take the chance?

EYES, EARS AND FACE – Watering eyes, deafened by wind blast and able to identify at least 25 different insects by their flavor...another mark of the poser.

SHOULDERS AND ARMS

– Wish you hadn't gotten that "I Love..." tattoo just before the big break-up? No worries, getting personal with the pavement will remove that in no time.

HANDS – Think those half-finger gloves make you look cool? Real riders call those "Nose-pickers"—that's about all they're good for.

KNEES – Posers collect sunburn, windburn, flying debris and maybe road rash. Just remember, there's no such thing as a fenderbender when you're on a motorcycle.

FEET – Personal contact with the shift lever, brake pedal, hot engine or the asphalt will forever change your perspective on footwear...wind on the toes is not "cool!"

HELMET – Well-fitted helmets are comfortable, quiet and protect you from impacts. They're a smart rider's first line of defense.

FACE SHIELD – Experienced riders know how many UFOs are out there and make sure they're prepared. Clear vision and saving face are a priority with pros.

JACKET – Armored, adjustable vents for changing weather conditions and highly visible to others. A good riding jacket is the pro's "home away from home."

GLOVES – provide a good grip on the bars as well as protecting those pinkies from flying objects, sun and cold. Pros have several pairs to adjust for changing conditions.

PANTS – Another important factor in preventing hypothermia, dehydration, sunburn and windburn. Also, most motorcycle injuries are to the lower extremities. Anyone who is "in the know", recognizes the value of comfort and protection from the road.

BOOTS – Provide comfort in hostile environments, protection from hot or sharp motorcycle parts and a good grip on the foot rests and the road. A pro knows the importance of all these.

POSER

Clearly hasn't ridden more than two blocks or she'd be smarter about riding gear and riding.

PRO

A smart, knowledgeable rider who knows and has "all the right stuff."

Photography courtesy of Oregon Department of Transportation, Transportation Safety Division.

Q & A

Safety Specialist Shares His Views on Motorcycle Safety

As a motorcycle safety specialist for the Naval Safety Center, Bill White, is an expert in motorcycle safety. He spends his days studying motorcycle trends and trying to determine the best practices to share with the Fleet. Ride Magazine recently sat down with him to get his take on motorcycle safety.

Q: What do you think could be the solution to reducing the rate of mishaps and fatalities?

A: Increasing skill sets is a good start, having a robust motorcycle mentorship program that provides the right kind of experience with the right people and increased awareness.

Q: What do you hope to change in regards to the current methods of teaching new motorcyclist?

A: I think the courses of instruction that we have are very good. Getting them the riding experience with the right examples is the key to teaching them the correct behaviors they need while riding.



(Photo By John Williams)

Bill White is a safety specialist with the Naval Safety Center.

Q: The Spring and Summer months entice riders to decrease the amount of protective gear, why should riders keep themselves covered?

A: Consider the clothes you wear under your gear. Many products have zippered vents that allow airflow like

shirts designed to wick away moisture. Stay hydrated. If you are a motorcycle rider, you are an athlete, treat yourself that way!

Q: Since younger riders are more likely to purchase a sports bike vs. a cruiser, what are some things they should look out for regarding safety on a sport bike?

A: The advent of anti-lock

brakes is a huge benefit for all motorcycles and in particular sport bikes. Buy a bike that fits your skill set and think ahead about your riding patterns.

Q: When riding in a group, do you feel that riders are influenced by the crowd they travel with?

A: Studies tell us that you will perform or act like the people you hang out with. The crowd you ride with is the number one factor in determining how you ride, and that can be the most important safety decision a rider makes.

Q: Do you ride a motorcycle?

A: I used to ride; I had a Harley Davidson FXSTD commonly called a Deuce. I

“Riding is a personal decision you have to make with respect to yourself and your family.”

loved it, but it caused my wife a lot of concern. She wasn't worried about me because I rode safe, it was the drivers on that were distracted or couldn't see me that she was most worried about. I gave it up, doesn't mean that I don't miss it but out of respect for my family I choose not to ride. Riding is a personal decision you have to make with respect to yourself and your family.

Talk the Talk; Walk the Walk

How well do you know your biker lingo?

Every subculture has its own lingo and bikers are no exception. Their language is most notable when they're conducting a group ride, but it's also a language that's engrained in the culture. If you're a biker, you may or may not have an extensive knowledge of biker lingo. Here are a few to add to expand your vocabulary.

A
Ape hangers – Handlebars that are very high

B
Back warmer – A person on the back of your motorcycle

Bar hopper bike – The spit shined and polished bikes that only come out for show-off purposes.

Big Twin – Any Harley bigger than a Sportster

Brain bucket – A helmet

C
Cage – A car, truck or other 4-wheeled vehicle

Cager – A person who only rides in a cage

Chopper – A motorcycle that has a greater angle on the front forks than is usually seen.

Coupon – Traffic ticket

Colors – A distinguishable set of patches and emblems worn on the back of vests by members of a motorcycle club.

Crotch rocket – Slang term for a sport-type motorcycle.

D
Do-rag – Cloth covering used over hair to prevent excess dirt or wind damage

Dresser – A large motorcycle designed for long-distance riding. It is "dressed up" with hard saddle bags and a windshield.

E
Easy Rider rifle rack – A set of aftermarket, forward foot pegs extended way out in the front of the motorcycle down tubes.

F
Flathead – Harley engine manufactured from 1930-1948

Full dresser – A large motorcycle designed for long-distance riding.

G
Garbage Wagon – A stock motorcycle with standard parts intact, very heavily loaded with saddle bags, chrome and accessories.

Gearbox – Transmission housing

Gearset – T set of gears within a bike's transmission.

Gear whine – The noise made by gears that aren't spaced correctly or are worn.

Giblets – Chrome Accessories

Giggle Gas – Nitrous oxide

Grabbing a Handful – Applying Brakes or twisting the throttle in excess.

Green track – A new track with little or no rubber laid down which can be slippery.

Gremlin – A gremlin is blamed when one can't find the defect or cause of some malady.

H
Hardtail – A rigid motorcycle frame with no shock absorbers

H.O.G. – Harley Owners Group

Hog – Any Harley bigger than a Sportster

L
Lane splitting – When a motorcycle rides the dotted or broken line between cars going in the same direction

M
Milwaukee vibrator – A Harley

O
OEM – Original Equipment Manufacturer

Old School Biker – A biker who lives by the protocols and traditions as set down by the returning GIs after WWII as it relates to behavior and respect.

P
P-pad – A smaller seat for a passenger located behind a bigger operator's seat
Pack – The group of motorcycles riding together as a unit

Pillion pad – A smaller seat for a passenger located behind a bigger operator's seat

R
Road captain – Usually a well respected veteran biker who rides in the back of a group and maintains the safety and unity of

the group.

Run – An organized ride

S
Shovelhead – A type of Harley engine produced from 1966 to 1984

SQUID – A motorcycle rider with little respect for speed limits, traffic laws or safety

T
Top rocker – The emblem located at the top of the back of the vest, which is usually the name of the club and is usually crescent shaped.

U
Ultracapacitor - A very high capacity energy storage system consisting of two parallel conductive plates separated by an insulating material.

Urban Tumbleweed - Plastic grocery bags/sacks that either fly up onto a hot exhaust or into your face

V
V Rod - Yamaha V Max. An engine designed in a "V" shape
V-Four - A four cylinder motor-

cycle engine with the cylinders arranged in two rows in an angled V.

Valanced - Refers to the larger sweeping fenders.

Vespa - Italian scooter manufacturer.

W
War-Horse - Well-ridden, road-worn bike (usually a chop)

Wash out - Where the front wheel loses grip and slides out to one side.

Water Jacket - Passages between cylinder walls through which coolant circulates.

Went down - Crashed. Can be any type of accident at any speed.

Wet Race - A race in which climatic conditions affecting the track surface are considered to be wet, opposed to dry.

X
X Trap - A place in the road where railroad or street car tracks cross, creating a slit in which the

narrow tire of a motorcycle can get caught or wedged.

Y
Yamahahog - A Yamaha that someone made to look like a Harley chopper (raked, big front wheel ect.)

Yard Shark - Dogs that come out of nowhere and try to bite your tires. Caution: They can cause motorcycle crashes

Yoke - Hollow tube that makes up the very front of the motorcycle frame and sits between the steering shaft and the triple-tree. It is the pivot point of the steering column.

Z
Z Bar - A handlebar that sweeps out of the risers toward the front of the bike and then sweeps back again towards the rider. A popular handlebar from the 1970's.

Z-Liner - This is the membrane between the upper material and the actual lining, which is suspended in the garment without any seams.

Zook - Suzuki

Biker Lingo Word Search

Try your hand at finding as many of the biker lingo words.

R M I E B C K R W Y C Y N C R
 O O G T O E E Z A N T A I O O
 Y A T L G P E R C E Z M W U I
 C O O I P A D M K A B A T P R
 G R K O C S P C E K A H G O R
 S A H E H A U E T R R A I N A
 L C R A S B P U H H Y H B T W
 N U R O N R Q A O A N O C V D
 H K H I D Y O G C W N G R A N
 L I A T D R A H O A B G F F E
 U R P A C S A G R P R C E Z K
 B P I L L I O N P A D T K R E
 Q L Q R N V R O D R W C L H E
 G R E M L I N H B T I B W U W
 D A L M Y W K J M X E E M H O

APE HANGER
 BEEMER
 BIG TWIN
 BRAIN BUCK-ET
 CAGE
 CHOPPER
 COLORS
 COUPON
 DO-RAG
 GASCAP
 GREMLIN
 HARD TAIL
 HOG
 PILLION PAD
 RUN
 ULTRACA-PACITOR
 VROD
 WAR HORSE
 WEEKEND
 WARRIOR
 X-TRAP
 YAMAHA-HOG
 YARD SHARK
 YOKE
 ZBAR

Kawasaki Unleashes the World's Fastest Bike

By Nika Glover

Kawasaki is known for producing motorcycles for riders who have a need for speed. These riders aren't interested in cruising or joy riding like Harley-Davidson fans. They don't want the wind in their hair. Sport bike enthusiasts want to feel as if the wind might rip their skin off. How did Kawasaki feed the speed addicts? They produced the Kawasaki Ninja HR2.

It's more glamorous than any model Kawasaki has built to date. The Ninja H2R is a showcase of craftsmanship. The reflective mirror-coated black paint was specially developed for the Ninja H2R. The sleek and seamless welding on its new trellis frame is consistent and elegant. Each model's body was assembled by hand to ensure an immaculate fit and finish.

But the company didn't do it alone. Kawasaki sought the help of other companies in their Kawasaki Heavy Industries Group to participate in an unprecedented level of inter-company collaboration. The Ninja HR2 was specifically designed to be a closed-course model. This



Courtesy Photo

The newly released Kawasaki Ninja HR2 is the fastest bike the company has ever created.

may not work for some motorcyclists who want to take it out for a spin on a regular basis. The Ninja HR2 is street legal. So yes, you can do that (and it might get you a lot of attention) but you won't be using it to its fullest potential. If you can foot the bill and you live close enough to a race course, enjoy it at a place that's free of the limitations that street riding would impose.

The Ninja HR2's 300 PS supercharged engine gives it intense acceleration with super sport-level handling performance. Try and find another motorcycle that will give you this experience and you'll be looking for a long time.

Because Kawasaki does not shy away from pushing boundaries, they produced this bike with a questionable amount of speed ability and still kept it legal. This bike is like a dragon on the road and just like the rumors of the mythical creature



Courtesy Photo

The Ninja HR2 even looks good naked. It has a seamless welding and an elegant trellis frame.

say, it's a fast fire-breathing beast. How fast? The H2R puts out a claimed 310 peak horsepower at 14,000 rpm without ram air and 326 hp in a stiff headwind! So yeah, it's pretty fast.

Is it safe? The answer to that question is like asking is sky diving safe. You have to weigh the risk for yourself. It is no less safe than any other bike on the market today. Motorcycling in general comes with a lot of risks. Kawasaki admitted that this bike is designed for a closed course. They also stated it was built to withstand an impact at high speeds but that doesn't mean the human body is.

Therefore, if you choose to use it for street riding, don't expect it to be safer than any other activity with such high risks. To really enjoy it the way it was meant to be enjoyed, buy some quality body armor and take your time learning how to handle a bike like this on a closed course. Also, you may need to get a second job because it'll put a crater-sized dent in your pockets at \$50,000 MSRP.

The Ninja HR2 Specifications

ENGINE TYPE: Supercharged DOHC inline-4, 4 valves per cylinder Supercharged DOHC inline-4, 4 valves per cylinder

DISPLACEMENT: 998cc 998cc

BORE x STROKE: 76.0 x 55.0 mm 76.0 x 55.0 mm

COMPRESSION RATIO: 8.5:1 8.3:1

CLAIMED HORSEPOWER: 200 hp @ 11,000 rpm
310 hp @ 14,000 rpm

CLAIMED TORQUE: 98.5 lb-ft @ 10,500 rpm 115.1

lb-ft @ 12,500 rpm

FUEL INJECTION: Four 50mm throttle bodies Four 50mm throttle bodies

GEARBOX: Six-speed Six-speed

FINAL DRIVE: Chain Chain

CLUTCH: Wet, slipper Wet, slipper

FRAME: Steel-tube trellis Steel-tube trellis

WHEELBASE: 57.3 in. 57.1 in.

RAKE: 24.5° 25.1°

TRAIL: 4.1 in. 4.3 in.

FRONT SUSPENSION: 43mm KYB fully adjustable inverted fork 43 mm KYB fully adjustable inverted fork

FRONT WHEEL TRAVEL: 4.7 in. 4.7 in.

REAR SUSPENSION: Uni-Trak single shock, fully adjustable. Single-sided swingarm Uni-Trak single shock, fully adjustable. Single-sided swingarm

REAR WHEEL TRAVEL: 5.3 in. 5.3 in.

FRONT BRAKE: Dual 330mm rotors, Brembo monobloc radial four-piston calipers Dual 330mm rotors, Brembo monobloc radial four-piston calipers

REAR BRAKE: Single 250mm rotor, two-piston calipers Single 250mm rotor, two-piston calipers

FUEL TANK CAPACITY: 4.5 gal. 4.5 gal.

CLAIMED WET WEIGHT: 525 lb. 476 lb.

SEAT HEIGHT: 32.5 in. 32.7 in.

Lower Cost Alternatives

Ninja ZX-6R \$12,699 MSRP

Ninja ZX-10R 30th Anniversary \$15,599 MSRP

Ninja ZX-14R \$14,000 MSRP

Editor's Note: As with all motorcycles, quality body armor is required to ride the Ninja HR2. The appearance of this motorcycle does not constitute an endorsement by the Department of Defense, U.S. Navy or U.S. Marine Corps.



Surviving the Ride a Top Priority

By Nika Glover

San Diego is the ideal place for a motorcyclist. The temperatures range from 57 to 72 degrees and it barely rains. People don't need to put their bikes away for the winter because the riding is good all year long. However, an increased opportunity to ride also creates an increased chance of getting into an accident.

It's this combination of factors that concerns Captain Howard Warner. As the commander of Naval Base Point Loma, he's aware of the increased risk for his Service members. It's also the reason Point Loma has one of the best motorcycle safety programs in the Navy.

"My top priority is the safety of Sailors. Motorcycle riding just happens to be one of the factors," said CAPT Warner. "We follow all motorcycle safety requirements by the Navy as well as specific state requirements. What we add to existing training and education requirements is having them sign a form acknowledging the risk. We address safety with Sailors very early. We then reinforce the importance

of safety by having a safety representative address it with them again. So very early on, we make it clear that if you're thinking about riding or already have a motorcycle, we want to bring this to the forefront of your mind."

While the Navy requires all Sailors and Marines to acknowledge the risk associated with riding, the key to Point Loma's success is their ability to reach every rider.

CS1 Ramon Tapia, the motorcycle safety representative at Point Loma, said he makes regular visits to each unit to ensure motorcycles pass inspection. If they are not, he takes note of it and instructs the rider on what needs to be fixed.

"Sometimes I have to let a rider know they shouldn't be riding their bike at all if it's not up to standards," said CS1 Tapia. "I always come back later to see if they have gotten the issue is taken care of."

CAPT Warner takes it a step further. "I believe in a fix-it-now mentality," he said. "If you have a requirement and you lapse on it, the consequences could affect your shipmate. Don't wait another month



Community at Naval Base Point Loma

assuming the issue will resolve itself. We have a multipronged approach that ties our motorcycle safety program into our core values."

The Captain said he personally meets with every sailor when they check in to discuss overall safety and ensure they understand what's expected of them. "If one of my Sailors is caught riding unsafely off base, I'll forbid them from coming on base with their motorcycle," he added.

This tough love approach is what makes the Point Loma program one to duplicate. However, the Captain point-

ed out they are not an example of perfection. They have had their fair share of fatalities and mishaps.

"After a Sailor was recently killed in an accident, it appeared to me that some motorcycle clubs don't

necessarily share the same appreciation for safety and speed limits," CAPT Warner said. "That doesn't mean there aren't those who put safety as a top priority. However, what we preach and teach is our biggest gap. I also know that every time someone tragically loses their life, it's not because they weren't following motorcycle safety standards."

"There are a lot of smart young people and this has nothing to do with age. The question is are they thinking of the margin of safety or are they letting the riding of the bike reduce their judgment?"

— CAPT Howard Warner, NBPL Commander

When speaking of another recent fatality, the Captain said, "Sadly this is the second Sailor I've been associated with who lost his life. It's a lack of appreciation for the reduced margin of error that stems from inexperience.

There are a lot of smart young people and this has nothing to do with age. The question is are they thinking of the margin of safety or are they letting the riding of the bike affect their judgment?"



Photos by Nika Glover

LEFT, ABOVE: Victor Santoni, a motorcycle safety instructor, monitors U.S. Service members as they participate in a motorcycle safety course at Naval Base San Diego. The course is designed to give students in-class training and physical course training to help them develop real world experience on a motorcycle. Riders in the San Diego region are required to adhere to California state laws as well as U.S. Navy laws regarding motorcycle safety.

"Perhaps some of our younger riders feel they are indestructible," he continued. "Yet, I can think of three accidents where the Sailor was following every guideline and just got hit by a driver who never saw him. I wish there were a better way to increase visibility."

Sometimes bad things happen. The Captain explained that they try to learn from each accident and work to ensure it doesn't happen again.

"In California we have multiple accidents because there's more opportunity to get on the road," he said. "What we're trying to do here at Point Loma is buy back that margin of safety through education, proper resources and ensuring every Sailor understands their responsibilities. We also talk about other things not directly related to motorcycle safety that provide a mindset of making good choices. What they need from me is a broader picture of responsibility."

To ensure motorcyclists understand how to properly incorporate safety, all riders at Naval Base Point Loma must attend the Navy and state approved courses.

U.S. Navy CS1 Ramon Tapia, a motorcycle safety representative with Naval Base Point Loma, poses for a photo in front of his Harley-Davidson motorcycle. Tapia monitors motorcyclist on base to ensure they comply with the rules.



Photo by Nika Glover

Christine Cossios, the Southwest Region Motorcycle Safety Coordinator, teaches Service members how to properly handle motorcycles during two types of courses. She said every motorcyclist must first attend a classroom session and a class on a physical riding course.

Cossios said she first started riding motorcycles in 1996 and got into an accident shortly after. "My accident was completely my fault," she said. "It was due to not paying attention and not being aware of my surroundings. With enough experience you learn how to handle a bike. I just don't want anyone to have to learn the way I did. I now encourage riders to consider life-long learning."

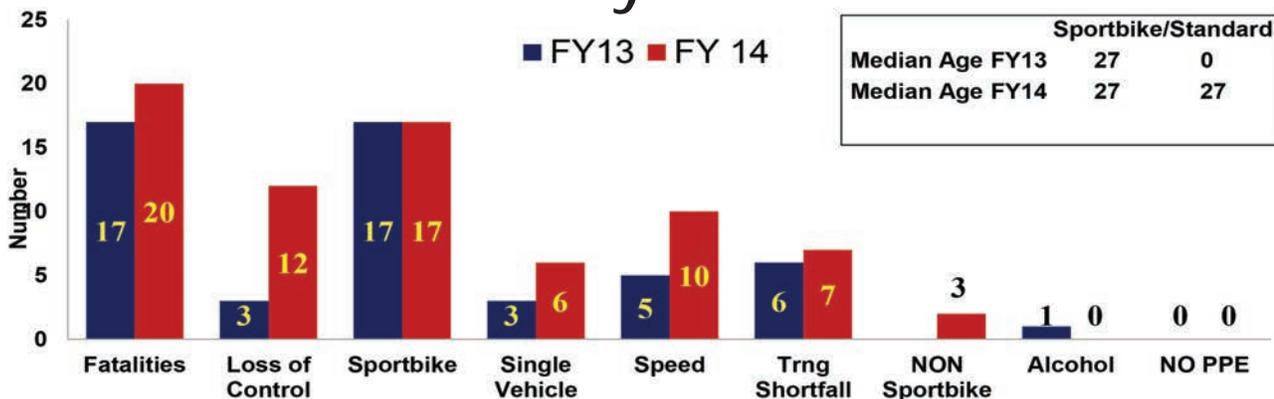
"Most accidents seem to happen while the rider is driving through a curve," Cassio said. "Our course is designed in such a way that the rider takes learning a step at a time. Eventually we get to the tough stuff like how to take a curve properly."

Cassio said a motorcyclist's body develops a certain type of muscle memory that will eventually make bike maneuvers feel natural and effortless. "This muscle memory will come into play during an accident and help the rider find their way out of a bad situation," she said.

"One of the most important things every rider can control is the gear they put on their bodies," Cassio stated. "There are so many things you can't control in an accident, but gear isn't one of them."

While Naval Base Point Loma's motorcycle safety program isn't perfect, they have a system in place that lets motorcyclist know their leadership has their back when it comes to their safety. The weight of knowing that responsibility rests on their shoulders and irresponsible behavior could affect everyone around them is the key to the program's success.

USN Motorcycle Fatalities



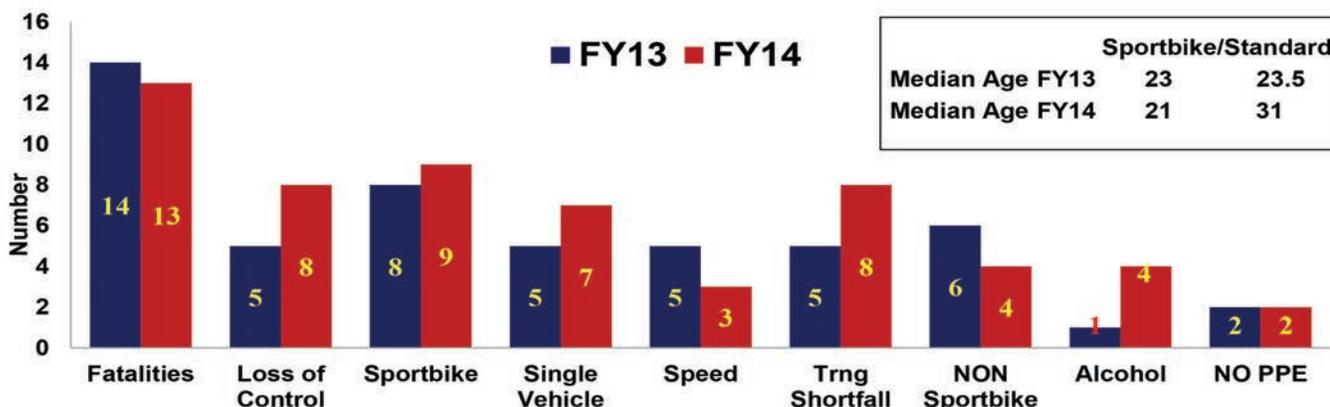
FY14 TRENDS

- 70% occurred during daylight hours
- 85% were riding sport bikes
- 80% of mishaps were the members fault due to poor situational/risk awareness
- 35% had not completed all required training
- 70% were E5 and below
- 55% (11 of 20) riders had less than 3 years experience.

CORRECTIVE ACTIONS

- Stay the course : Close the Training Gap
- Establish and emphasize motorcycle mentorship programs
- Ensure new riders have a mentor.
- Ensure 100% of units have an MSR assigned
- Stress Risk Management
- Explore opportunities for joint or advanced training

USMC Motorcycle Fatalities



FY14 TRENDS

- 85% occurred during daylight hours
- 69% were riding sport bikes
- 75% of mishaps were the members fault due to poor situational/risk awareness
- 67% had not completed all required training
- 85% were E5 and below

CORRECTIVE ACTIONS

- Stay the course for Training completion
- Ensure Identification of all riders
- Establish and emphasize motorcycle mentorship programs
- Explore opportunities for joint or advanced training

Notable Changes to Motorcycle Rider Training

By Alicia Harkins

If you're a rider or a trainer, you may already have heard of changes to the Navy motorcycle rider safety training and the American Automobile Association Driver Improvement Program (AAA/DIP). Commander, Navy Installations Command (CNIC) has implemented a new training contract that affects potential riders, California state requirements, and installation-level training and driver improvement courses.

Class-Attendance Minimums and Cancellations

1. Six-student class minimum. Previously, motorcycle class offerings had a maximum of 12 students for the Basic Rider Course (BRC) and six students for the other classes. The new class-size maximum is now six students for all classes. Two BRC classes can be run simultaneously, since most of the motorcycle ranges can accommodate 12 riders.

When potential students read the class schedule posted online or on Enterprise Safety Application Management System (ESAMS), they might see two classes listed for the same day, time and location to get the maximum of 12. Students are to register for only one of the classes. At a minimum, one of the two classes will be held.

2. No cancellation due to "no shows." Students who arrive for class will receive the training regardless of the number of students enrolled in that class.

3. Class-cancellation procedure. If less than four students are enrolled in a class

scheduled for that week, the class instructor will cancel and reschedule that class. Cancelling the class ahead of time will prevent unnecessary travel and lost work time for Sailors.

The Navy traffic safety contractor, Information Sciences Consulting, Inc. (ISCI), will provide training motorcycles as required for the BRC. The contractor may use contractor-owned motorcycles or use a third-party vendor to provide motorcycles. At some smaller or remote locations, ISCI may subcontract all motorcycle training to a third-party vendor, such as a community college or a Total Control school. The government will no longer provide government-owned motorcycles (these are being transferred to the Defense Reutilization and Marketing Office).

Clarification of Traffic and Motorcycle Rider Safety Training Management

CNIC's responsibility to provide traffic safety training is shared throughout the chain of command. Specific responsibilities are stated in paragraph six of OPNAVINST 5100.12J. CNIC region and host installation commanders are also resourced to provide traffic safety program services to tenant commands and other Navy commands within the region at the installation level.

Currently, CNIC HQ provides motorcycle training via a centrally managed Navy contract. The current contract targets motorcycle safety training and not AAA/DIP training. A few Alive at 25 driver-improvement classes were included in the Navy



contract, but they are not the primary focus of the contract. The Alive at 25 class provides driver improvement information pertinent to Sailors 25 years old and under. If the Alive at 25 training does not meet the needs of the individual Sailor, then it is up to the Sailor's host installation command to provide the resources for the Sailor to obtain the eight-hour AAA/DIP training.

As stated in the Navy Traffic Safety Program instruction, CNIC regional and host installation commanders shall coordinate, manage, and provide resources for an effective overall traffic safety program. Where CNIC resources are limited at the installation command level, then region commanders can submit a resource allocation management issue to request additional funding from CNIC headquarters.

CNIC provides general traffic safety services Navy-wide for all Navy military and Department of the Navy (DON) civilian personnel. These services are specifically directed for government motor vehicle operators, drivers operating private motor vehicles on a Navy installation, and operators who have been determined to be at fault in a traffic

mishap while on a Navy installation. OPNAV policy does not specify that CNIC provide non-motorcycle training as part of the Navy motorcycle contract. OPNAV policy also does not specify that CNIC provide individual training as a result of a moving violation received off base. Individuals who receive a ticket or are in an accident off base are responsible for correcting any violation themselves.

The Navy does have a resource for DIP training through the Naval Safety Center. Mike Borkowski, a traffic safety specialist, is a certified master trainer for AAA/DIP and can train employees to become AAA/DIP instructors.

Installation commanding officers can use this resource by designating at least one person to be the AAA/ DIP instructor for the installation. The designated person can be a member of the command training team, force protection, fleet and family readiness, or from any department within the organization.

Alicia Harkins is a Motorcycle Safety Analyst for the CNIC.

California's Motorcycle Rider Requirements

California changed its state motorcycle-license training requirement from the Motorcycle Safety Foundation (MSF) courses to the Total Control motorcycle training courses. As of Jan. 1, 2015, a motorcycle rider in California who wants to get his or her first motorcycle rider license (or a new license) must take classes from Total Control; MSF classes are no longer accepted by the California Department of Motor Vehicles. ISCI is providing MSF classes only nationwide except in California where Total Control classes will be offered.

Navy policy currently requires MSF courses, but allows Total Control courses as an equivalent option when approved by the Naval Safety Center.

The Navy is required to provide motorcycle rider training to Sailors per the Navy Traffic Safety Program instruction (OPNAVINST 5100.12J). The Navy is not required to provide motorcycle rider licenses or to provide motorcycle rider training to meet state requirements. This means that in California, and possibly other states, Sailors might have to fulfill two sets of requirements (Navy and state) to get a new/first motorcycle license. Sailors will have to take additional state-mandated training on their own and at their own cost.

Motorcycle riders who already have their motorcycle licenses are not affected by the change in the California law (unless California has a recertification requirement) because they only have to meet the Navy's training requirement.

10

Critical Pieces of Body Armor

1. Helmet

The fact that wearing a helmet is No. 1 is a no-brainer. Most states require you to wear a helmet and all military services require it. While it's not technically "armor" just look at the numbers to see why wearing a helmet makes a difference:

- Wearing a helmet reduces the risk of death in a crash by 37 percent.
- Riders with serious head injuries paid an average of \$43,214 for hospital care, compared to \$15,528 for riders with minor head injuries.
- As helmet laws were repealed in some states, motorcycle deaths jumped from 2,897 in 2000 to 5,154 in 2007, a 78 percent increase.

So yes, it's definitely a no-brainer. Your helmet is your most important piece of motorcycle armor.

RIGHT: Check out these top rated Department of Transportation (DOT) and Snell Memorial Foundation approved helmets.



This full face Shoei Solid Qwest helmet was rated No. 1 by DOT and Snell.



The GMax GM54S was rated a 4.2 out of 5 by DOT and Snell.



The HJC CL-16 was rated a 4.8 out of 5 by DOT and Snell.



A U.S. Service Member wears a full coverage helmet as he participates in the Third Annual Military Motorcycle Safety Ride and Bike Show. The event promotes the safe operation of motorcycles.

(U.S. Navy photo by Mass Communication Specialist 3rd Class Molly Greendeer)

2. Back Protector

From your spine to your kidneys, protecting it all can be the difference between losing your life and walking away from a crash. Your arms will heal if injured. So will your legs, hips, collarbones, wrists, fingers and the myriad other bones that make up your skeleton. But your spinal cord is not so resilient. So until the day regenerative technologies exist to repair your ripped spinal cord, you're going to want to protect it.

So you should start with a cervical spine (neck) protector. Then if you can afford it, consider additional armor to beef up the rigidity of your back. Don't waste your money on soft armor. Yes it may be less expensive, but don't put a dollar amount on your life. Go for the hard stuff instead.

You should seriously consider is a protector jacket. They are perfect for wearing as an extra layer underneath your riding jacket and give

great protection to all of the areas of your torso.

Another great way to keep your spine safe are the spine protectors that attach around the waist and are worn under your jacket. These little guys don't offer as much protection but still put an extra layer between your spine and the street. Their biggest upside is how they won't cut down on your range of movement or get in the way at all as long as you buy one that fits properly. But since most come with adjustable waist straps, it's pretty easy to get them cinched up around your midsection.

In the book *Rockwood and Green's Fractures in Adults*, a study found that the thoracic spine is the most common spinal injury point for motorcycle crashes. This stretches from your upper back to just below the rib cage. So consider additional armor here. It can be a strap-on backpack, or it can be built directly into a jacket.



A full upper body protector with detachable parts covers all areas necessary and can be strapped on directly over a motorcycle jacket.



A pull over vest provides support for the chest and back area and can be worn over a jacket.



Jacket back protector inserts are inserted into motorcycle jackets for cleaner look.



A wrap or strap on back protector is designed to be worn over a motorcycle jacket or vest.



An upper body jersey offers a heat resistant option that can be worn under a jacket.

3. Jacket

Every motorcyclist should own a jacket, and to varying degrees that jacket will be armored. Go for a thick leather or nylon jacket reinforced with carbon-fiber supports and molecular armor.

What's molecular armor? Added to the mix of hard armor (like a plastic shell) and soft armor (like memory foam) are materials that are flexible and soft like a liquid until smacked with pressure as in a crash, at which point they turn rigid. It's like that trick with cornstarch and water: Push it gently and it's a goopy liquid; smack it and it's suddenly a solid that rebounds on your hand. Molecular armor is a very cool material, and it's available today.

10 Critical Pieces of Body Armor



LEFT: When it comes to multifunction mesh based riding gear, there's a multitude of options. Mesh jackets offer heat, wind, rain and cold protection. Most are constructed in cordura fabric with ballistic nylon mesh and panels.

RIGHT: A leather jacket offers good protection but comes with added cost because of its durable material. The right leather motorcycle jacket will come with added protections such as integrated shoulder and elbow caps, ventilation panels and comfort molded neoprene cuffs.



(U.S. Marine Corps photo by Private 1st Class Roberto Villa Jr.)

U.S. Service Members wear full motorcycle gear to include jackets, as they attend an advance motorcycle techniques course at Marine Corps Base (MCB) Hawaii, Kaneohe Bay. Just as depicted in this image, motorcycle jackets should be bright in color and provide full coverage of the upper torso. The brighter the color, the better so motorist can see the biker coming.

4. Hip Armor

Motorcyclists often ask, "Do I really need hip protection?" That response should always be yes. You only need to protect the pieces you want to keep. That advice is especially true with your hips, second only to collarbone fractures and broken pelvises in injury statistics.

This is partly because a hard hit to anywhere in your lower body channels itself into your pelvis, and partly because we tend to bounce and slide especially well on the parts that usually sit in the saddle. Don't believe it? Just take a look at any online video of sliding motorcycle crashes and you'll see that in far more than half, the rider ends up skidding on his or her derriere. You can purchase riding pants with hip padding or layer up your own padding with hip-specific inserts.

5. Pants

During the early days of leg protection, designers of motorcycle safety equipment looked to encase the lower body in what was effectively an exoskeleton that allowed the body to bend only how it was supposed to bend. But what they found was interesting: Reinforcing legs could lead to worse overall rider injuries due to rider ejection and torso pitch.

Imagine it: Instead of buckling to absorb the force of a crash, your legs are kept rigid and act as a lever with the ability to throw around your upper body like a rag doll.

Still, there are a couple must-haves of lower-body motorcycle armor. First, it should be made of a material that protects against road rash (duh). Thick leather and Kevlar are good. Your lower-body protection should be constructed of a shell to distribute force and padding to absorb it.



(U.S. Marine Corps photo by Private 1st Class Roberto Villa Jr.)

A motorcycle safety instructor wears thick leather pants designed to withstand skidding and impact during an accident. He prepares U.S. Service Members for an advance motorcycle techniques course at Marine Corps Base Hawaii, Kaneohe Bay.



LEFT: Hip Armor is created to be worn under a pair of kevlar jeans or motorcycle pants. They provide protection where it counts the most. The hips are very vulnerable in an accident so hip protection is necessary. A pair of hip protectors range in price from \$50-\$200.

RIGHT: Motorcross pants can be worn by motorcyclists and dirt bike riders alike. They are durable and offer protection from skidding. Two other good alternatives are kevlar jeans and leather pants. The mesh material in motorcycle pants can be purchased with insert pockets for the motorcyclist who wants to add in extra protection such as hip inserts or knee pads. They can be worn during all four seasons.



10 Critical Pieces of Body Armor



U.S. service members participate in an Advanced Rider Track Day held by the California Superbike School at Marine Corps Air Station Futenma. All attendees of the event wore proper gear to include boots ranging from plastic to leather boots. While the jury is still out on which type is the best, plastic boots tend to withstand longer periods of skidding without reaching the top layer of the skin. Leather boots do provide lots of protection, but are made from animal hide and are prone to damage just as skin is. However, there are leather boots that can be purchased with plastic buckles for added protection.

Plastic boots offer the most protection in regards to motorcycle accidents where skidding occurs. The hard plastic shell creates a barrier between the skin and the boot. However, plastic boots don't always offer as much flexibility as desired. Motorcyclist must consider their needs and riding habits when buying motorcycle gear.



Motorcyclist who enjoy touring can rely on full grain leather gortex boots to do the job they need of protecting them if they travel at lower speeds. The boots come with a waterproof liner to keep feet dry. They also have a cross ankle buckle closure that provides ankle support and protection from road rash.



6. Boots

When it comes to jackets and pants, the debate rages as to whether Kevlar is better than leather. The same is true of whether you should reinforce your bones with steel alloy inserts, or whether you should just pad them. Of course if you take that route, you'll allow your flapping limbs to absorb shock that could otherwise damage more important things, like your spine and head. With boots plastic trumps leather. Just look at the difference between racing boots and street boots -- high-speed racing boots almost univer-

sally include plastic or composite shells for sliding across the pavement, and a more supple liner to keep your feet comfortable. Does leather look cooler? Of course it does. You just have to ask yourself if you care about your looks over your safety.

You don't need your boots to be supple and flexible all the way around. You need them to take a licking and keep your feet and ankles pointing in the right direction. Go big. Go bad. Go high-tech composites and plastic.



(U.S. Marine Corps photo by Private 1st Class Roberto Villa Jr.)

U.S. Marine Corps Lance Cpl. Trevor E. Laycock an Avionics Technician with Marine Light Attack Helicopter Squadron 367 (HMLA-367), starts his motorcycle during an advance motorcycle techniques course, at Marine Corps Base Hawaii, Kaneohe Bay. Laycock wears motorcycle gloves with a plastic exoskeleton over the joints. The plastic over the joints protects the areas where damage from an accident is most prevalent. When a person is propelled forward or falls, they naturally use their hands to guard their body from the fall. This can lead to major damage if the hands aren't covered. Motorcycle gloves come in many types of materials and have various levels of protection.



Neck braces like this one help prevent multiple neck and spine injuries during an accident. Most motorcyclist overlook the neck when considering purchasing motorcycle gear. A neck brace can be purchased as an insert or as a detachable item that can be worn over or under a jacket. This Leatt-Brace is an injection produced glass reinforced nylon neck brace system designed by medical professionals.

7. Gloves

If you don't want your fingers snapping like a matchstick, now is the time for an exoskeleton. It's easy to find a pair of gloves that offer reinforcement for your fragile bones. However, no one wants to ride around like a robot.

Those bulky gloves can cause a crash just as easily as if you were wearing pillows on your hands. So you need something that will protect those fingers and keep them flexible.

Most of today's high-tech armor gloves combine Kevlar and leather, sometimes with carbon-fiber reinforcements in areas like the knuckles that tend to be slide points.

This even balance between the burly safety of an exoskeleton and the fast-and-light safety of precision control is one that you will find best suits you.

8. Neck Collar

Of course you don't want to go around wearing a neck brace like you just got into an accident. However, your neck is a terrible thing to waste. There are some great options that will keep your neck protected during an accident.

The collarbone is the most commonly broken bone in motorcycle crashes. The clavicle is also up there in most broken. The reason for that is when you extend your arm to break your fall, the impact channels its way up directly into your clavicle. This also happens during direct impact accidents. A neck collar can take the impact for you.

10 Critical Pieces of Body Armor

9. Chest Protector

In the movie *Iron Man*, Robert Downy Jr.'s character Tony Stark wears a complete suit of steel armor. It might look cool to wear armor that makes you look like you've got some seriously chiseled abs, but in reality you don't need anything that serious (or ridiculous) to protect your chest during a motorcycle accident. What you want is a solid shell that distributes the force of impact across ample underlying padding.

The latest chest armor protects your chest from bending. It absorbs the force of blunt impact. It also keeps your vital organs safe when your rib cage cannot. So if you want to keep them, armor them. You can go high tech or low tech but at the very least make sure your outer wear has reinforced zones. For instance if you're wearing a full upper body armor, make sure it has reinforced elbow zones. If your leather jacket isn't very thick, consider putting vest armor over and wearing elbow pads. Or if it's big enough, but the armor under it and no one will know what's under there. This will increase the distance you can skid during an accident.

10. Elbows & Knees

Your elbows and knees are the pointy bits that poke into the pavement when you come flying off your bike. You simply won't have time to think about protecting them or any other part of your body at the moment an accident happens. So armor them with reinforced padding that contain a tough plastic outer shell.

Look for "CE-certified" elbow and knee (and everything else) protectors, which means that when the testing body smacked the front of the armor, the force measured at the back of the armor averaged less than 35 kilonewtons (the standard measure of force).



LEFT: These rider designed chasis contain d30 intelligent foam and CE certified material that creates quality blockers for your under-appreciated pointy bits. The elbows tend to stick out and take the impact during an accident. Hard surface elbow pads act as a guard against joint dislocation.

RIGHT: The POD MX K700 ligament knee brace sets new standards in ergonomics and function. Developed with feedback from professional MX, FMX and off road riders. This brace not only supports the knee but it protects it from skids and dislocation. It can also be worn over kevlar jeans or nylon pants.



LEFT: Some chest protectors are designed to rest against the chest and support a neck brace. They can be worn over jackets and military uniforms. The average price ranges between \$100-\$300.

RIGHT: An upper body protection jacket is the ultimate protector for the off-road enthusiast. It offers full protection plus a detachable chest, elbow and back brace. The benefits of a full coverage protector is in the cost savings and having a wider area of coverage in a quality material.



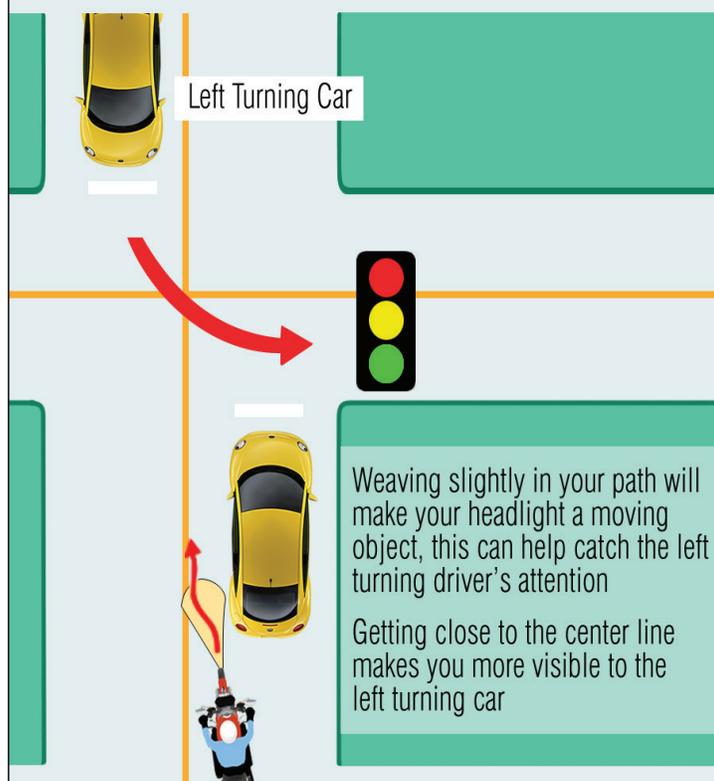
STREET SURVIVAL TIPS

Many motorcyclist agree that there's nothing like getting their bike out on the open road. However, there are plenty of obstacles in the way of carefree riding. While experience can be a great teacher, most motorcyclist don't want to take the path that leads to broken bones or something worse. To help shortcut a bad experience, check out these quick tips on how to survive on the street. With a little practice and patience, you could find that you may have avoided an accident or two.

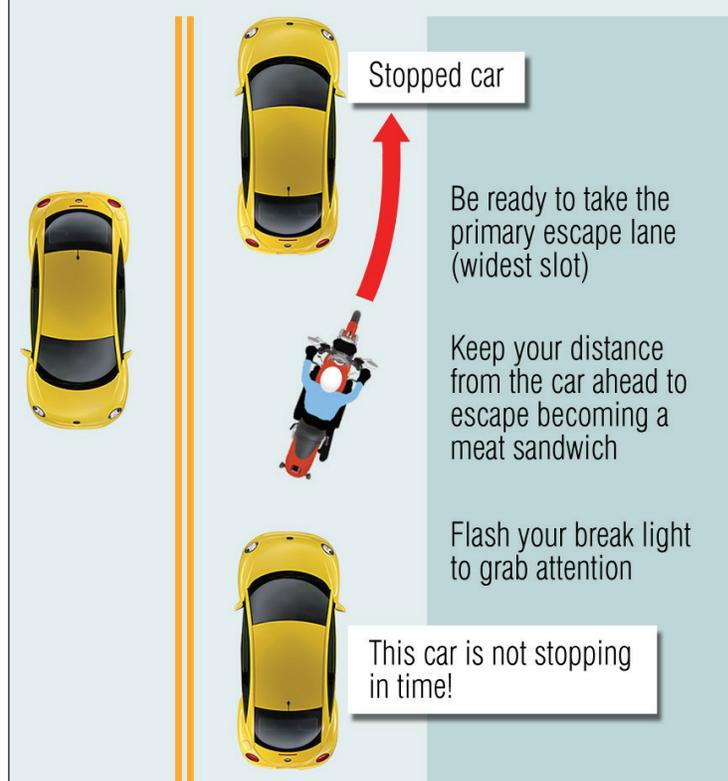
BE VISIBLE



INTERSECTIONS



ESCAPE LANES



Graphic designed by Visual Information Specialist Allan Amen



Quiet passion

Sleek, Fast and Quiet: Electric Bikes are Making

By Nika Glover

In the movies *Tron* and *Tron: Legacy*, both starring actor Jeff Bridges, a man gets trapped inside the digital world of a mainframe computer. Some of the characters ride motorcycle-like vehicles called light cycles. They are electric and rely on compartmentalized energy to reach top speeds. These sleek lightweight vehicles wisp by barely making a sound while transporting their

passengers through a maze of adventures.

Imagine having a piece of equipment like this in real life. Not only is it possible, it has technically already been produced for years by several well-known companies. While no one is riding around looking like a character from *Tron*, they are able to whisk by in near silent electric motorcycles that offer cheaper energy-efficient options.

The question then becomes, are you the type of biker who

wants an electric bike?

First, if you didn't know it already, an electric bike is run via four options: charging, battery swapping, hybrid (gas and charging) or fuel cell (mostly unavailable). These can be seen as a limitation or as an asset depending on how open-minded you are. The average time to recharge is 8 hours. So while you dream away into the night, your bike can be charged and fully ready at sunrise.

The speeds of most electric ve-



The Harley-Davidson LiveWire is the company's latest edition to their motorcycle portfolio. Although not yet released for sale, the bike may change the way people view electric bikes. For a limited time Harley-Davidson is taking the bike across the country to allow ordinary citizens test it. If you'd like to get the opportunity to test it, go to <http://projectlivewire.harley-davidson.com> to find out when it will be in your area.

(Photo courtesy of Harley-Davidson)

the Case for Going Green

icles are also fairly comparable to a traditional motorcycle of the same size and weight. In August 2013, *Road and Track* magazine tested electric motorcycles and actually found several models to be faster than gas bikes. Considering the weight of a full tank of gas, one would suspect a lighter bike might get more speed given the right moment. They also stated that electric machines have a better 0 to 60 acceleration rate because most electric bike companies have spent multiple man

hours researching ways to develop immediate full torque.

However when it comes to range, electric bikes fall short. Gas can take you far and wide. Unfortunately, with an average limitation of 130 miles electric bikes cannot handle the distance. In fact, 130 miles is considered an exceptionally long range for an electric bike. So if you're living in New York City and you want to visit your mom in Washington, D.C., you're going to have to find a hotel that will let

you charge up for the night. Normally this is just a 4 hour trip one way. Needless to say, many bike enthusiasts will find that to be a hard pill to swallow.

Don't fear this minor limitation if you are planning to keep your bike local. The benefits seem to outweigh the negative aspects. For instance, when it comes to maintenance an electric bike is pain free. These bikes require virtually no maintenance.

You don't have to worry about lubricating, adjusting or tuning. Another benefit is zero to low fuel costs. For instance, if you were to ride an electric motorcycle for three months at 1,700 miles, it would only cost you \$30 for electricity.

A pro and a con for both electric bike riders and drivers is the noise factor. An electric bike is stealth. It's so silent they tend to sneak up on pedestrians and drivers. These same people are often startled and annoyed by the sound of a traditional gas motorcycle. For safety purposes and aesthetic reasons some electric bikes are equipped with artificial noise emitters.

As with any purchase you make, you as the consumer or bike enthusiast must consider what you're looking to get out of a bike before you make the purchase. Electric bikes can range from \$15,000 to \$50,000 so no matter the budget it's a viable option.

However, these bikes are different. If you're in love with everything about a traditional motorcycle but just want the latest and greatest thing, you'll likely find yourself feeling disappointed.

The type of person who buys an electric bike has a specific need for it ranging from noise or environmental concerns to financial reasons.

Either way, the competition is stiff between gas and electric motorcycles. There's something out there for everyone.

CALENDAR OF EVENTS

JULY

7/15-7/18/2015 Roar On the Shore Bike Rally 2015
Erie PA

7/16-7/19/2015 The Boogie (Indiana Boogie)
Springville IN

7/16-7/19/2015 Kentucky Bike Rally Sturgis KY

7/23-7/26/2015 Wetzelland Motorcycle Rally Van
Wert OH

7/24-7/26/2015 Hog Wild Motorcycle Rally Fea-
tures three days of fun. music, food, vendors and
beautiful Northwestern American scenery, Ocean
Shores WA

AUGUST

8/2/2015 Testicle Festival (Testy Festy) Clinton MT

8/3-8/9/2015 Sturgis Motorcycle Rally 2015 Sturgis
SD

8/5-8/9/2015 Apple's 12th Annual East Coast Mo-
torcycle Rally Little Orleans MD

SEPTEMBER

9/3-9/7/2015 Easyriders Rodeo Tour & Motorcycle
Rally -Chillicothe OH

9/3-9/6/2015 Wing Ding 37 "Rocket City Road Trip"
Motorcycle Rally - Huntsville AL

9/4-9/7/2015 Four Corners Motorcycle Rally Ignacio
CO

9/4-9/7/2015 Thunder in the Rockies
Motorcycle Rally Loveland CO

9/10-9/13/2015 Roar To The Shore Motorcycle Rally
Wildwood NJ

9/10-9/13/2015 The Texas Rally - Luau & Biker Bash
Lyons TX

9/16-9/20/2015 Golden Aspen Motorcycle Rally -
46th Annual Motorcycle Rally - Ruidoso Downs NM

9/16-9/20/2015 Catskill Mountain Thunder East
Durham NY

9/17-9/20/2015 Delmarva Bike Week Salisbury MD

9/17-9/20/2015 Lake of the Ozarks BikeFest 2015
Lake Ozark MO

9/17-9/20/2015 OC Bikefest Ocean City MD

9/23-9/27/2015 Reno Street Vibrations Fall Motorcy-
cle Festival Reno NV

9/23-9/26/2015 Bikes, Blues and BBQ Fayetteville
AR

9/24-9/27/2015 June Bug Boogie - Fall Motorcycle
Rally Cookeville TN

9/25-9/27/2015 11th Annual Ray Price Capital City
Bikefest Raleigh NC

9/25-10/4/2015 Myrtle Beach Bike Week® Fall Rally
Murrells Inlet SC

OCTOBER

10/1-10/4/2015 HogRock 'toberfest Cave In Rock IL

10/1-10/4/2015 Las Vegas Bike Fest 2015 Las Vegas
NV

10/7-10/11/2015 Angel City Fall Motorcycle Rally
Unadilla GA

10/9-10/11/2015 2015 Budweiser Corpus Christi Bike
Fest Corpus Christi TX

10/15-10/18/2015 American International Motorcy-
cle Expo (AIMExpo) Orlando FL

10/15-10/18/2015 Biketoberfest - Daytona Beach
Daytona Beach FL

10/18/2015 Love Ride - 32nd Annual - 2015 Castaic
CA

10/21-10/25/2015 15th Annual Autumn Thunder
Beach Motorcycle Rally Panama City Beach FL

10/23-10/25/2015 American Heat Motorcycle Rally
Palm Springs CA



Photo by Chris Heald courtesy of Wikimedia

Motorcyclist attend the Sturgis Motorcycle Rally. The event will be held on August 2015 in Black Hills South Dakota. Each year Sturgis draws between 500,000 to 650,000 visitors. The event is world famous and brings in visitors from across the globe. Planning for this event should be done at least a year in advance because hotel reservations go quickly.

NOVEMBER

11/5-11/8/2015 Lone Star Rally 2015 Galveston TX

11/5-11/8/2015 Roscoes Chili Challenge - 30th Anniversary Motorcycle Rally Lakeland FL

JANUARY 2016

1/30-1/31/2016 38th Colorado Motorcycle Expo Denver CO

1/31/2016 - Early Bird Motorcycle Swap Meet - Periyopolis, PA

FEBRUARY 2016

2/12-2/14/2016 Timonium Motorcycle Show Motorcycle Show, Timonium MD

2/20-2/21/2016 Easy Rider Bike Show, Columbus, OH

MARCH 2016

3/4-3/13/2016 Daytona Bike Week - 2016 Daytona Beach, FL

SUMMER 2015

APRIL 2016

4/6-4/10/2016 Arizona Bike Week 2016 Scottsdale, AZ

4/22-4/24/2016 20th Annual Leesburg Bikefest 2016 Leesburg FL

4/26-4/30/2016 Laughlin River Run Motorcycle Rally - Laughlin NV

4/27-5/1/2016 18th Annual Spring Thunder Beach Motorcycle Rally Panama City Beach, FL

MAY 2016

5/15/2016 The 6th Annual Kenneth A Neidinger Memorial Motorcycle Ride, Willow Street, PA

5/13-5/22/2016 Myrtle Beach Spring Bike Week, Myrtle Beach, SC

JUNE 2016

6/7/2016 Americade Touring Motorcycle Rally 2016, Lake George, NY

“One of the things that makes motorcycling so great is because it never fails to give you a feeling of freedom and adventure.”

– Steve McQueen



Commander, Naval Safety Center
“Preserving Combat Readiness and Saving Lives”