Riding in the Wind

Riding safely in strong winds requires an understanding of how wind affects our bikes and techniques for maintaining control. Of specific concern are cross winds, wind gusts and air turbulence. Winds do not impact all bikes the same. In general, a light bike is more affected by the wind than a heavy bike. A bike with a large wind profile, e.g., with fairing, tour-pak, passenger, etc. is more susceptible to the wind than a bike with less profile.

A cross wind, hitting the side of a bike, tends to blow the bike in the opposite direction from the wind. The rider must lean the bike into the wind by countersteering, holding and adjusting the lean as necessary, so that the bike goes straight. The stronger the wind, the more lean is required. The rider must continuously determine the right amount of lean based on what the bike is doing. A steady wind can be temporarily blocked by traffic and terrain features, requiring the rider to make immediate and sequential adjustments to the lean. It may require leaning into the wind, quickly straightening the bike while the wind is blocked, and quickly leaning again as the wind returns. To a certain degree, the rider can anticipate these changes by looking for approaching vehicles such as large trucks that will pass between him and the wind or large stands of trees, other vegetation, structures, etc. that will block the wind as he rides by.

Wind gusts are sudden brief increases in wind speed, which may come with no warning. Riding in these conditions requires relaxing the upper body and arms and holding the handlebars firmly, but not tightly. There is a gyroscopic force from the bike's rotating wheels that tends to move the bike forward in a stable manner. Holding the grips too tightly interferes with the bike's natural tendency to right itself. Hold the handlebars lightly but firmly, countersteer the bike as necessary, but let the bike move under you.

Experienced riders use various techniques to maintain stability when wind gusts hit. Some increase their speed to increase the bike's forward energy in relation to side force energy of the wind thrust. Others feel more in control by reducing speed, which allows more time and space to react. Riding in one gear lower provides more throttle response. Lowering your body toward the fuel tank presents a lower profile. Clamping the fuel tank with the knees helps the rider to feel more secure on the bike. Each rider should do what feels right to him.

Turbulence from passing trucks is common. A turbulent bow wave of spinning and disruptive air is created as the front of the truck pierces the air. Some of it extends out laterally and follows the truck's sides. More turbulence is generated at the end of the truck as streams of air from the top, sides, and bottom of the truck converge. A faster moving truck creates more turbulence. A motorcycle can encounter this turbulence at the sides and at both ends of a truck, as the bike overtakes and passes the truck, or passes the truck going in the opposite direction. Riders should avoid this turbulence by giving trucks, RVs and other large and fast moving vehicles a wide berth. When this is not possible, the rider should use the same riding techniques as indicated above for wind gusts.

Some riders will ride alongside of a truck so that the truck can shield the motorcycle from a strong wind. At times this may be prudent. However, the rider must avoid getting too close to the truck and encountering the turbulent air coming down the side. He is also compromising

several basic safety tenets: “Ride so that you can see.” “Ride so that you can be seen.” “Maintain a space cushion from other vehicles.” In this case, the rider can’t see what may be approaching from the other side of the truck and vehicles on that side can’t see him. He might be in the truck’s blind spot so the driver can’t see him. If the wind blows the truck in his direction or the driver decides to change lanes in his direction, the rider could be in dire straits. Riders must use good judgement in these situations.

Lane position is important. Ride in a lane to maintain separation and minimize turbulence from passing vehicles. Ride so that a sudden strong gust of wind can’t push you into traffic or off the shoulder of the road before you can regain control of the bike. Avoid riding next to high-sided vehicles that may be pushed into your lane.

Strong winds seem more prevalent along open spaces, long bridges, high overpasses, etc. Wind is also of concern in the rain when the bike’s tires have less traction. Gusts of wind can be especially hazardous to a bike leaned over in a curve. Curves should be taken at reduced speed in windy conditions, especially if the road surface is wet.

If we know in advance that the wind will be a problem on our intended route, we can delay the ride or choose a different route. Available sources, including www.windfinder.com, provide wind data, including travel restrictions nationwide. For example, a *Wind Warning* for the Chesapeake Bay Bridge means “Sustained wind speeds or wind gusts of 30-39 mph” and certain vehicles, including motorcycles, are advised to use caution while traveling across the bridge. One of our experienced Road Captains who travels the bridge regularly, recommends that even experienced riders not use the bridge when winds are over 30 mph, with a limit of 20-25 mph for less experienced riders.

There will be circumstances where we can’t avoid strong winds on a ride and we must be able to handle them. Preparation and practice can improve a rider’s ability. Start with moderate winds and work up to stronger winds. Look for indicators such as flags, moving vegetation, etc. and note the wind’s direction and get an indication of its speed. Note traffic and terrain features and try to predict how they will affect the wind. Ride in the wind using the techniques presented above. Particularly note how the bike reacts to various wind scenarios and how it responds to efforts to control it. With practice, a rider’s confidence and his ability to ride in the wind will improve. If, however, a rider ever feels that he is not in control of his bike, the safest thing to do is to pull over and wait for the strong wind to pass.

When parking the bike, if the wind is strong and blowing debris, park downwind of a structure that will shield it. If in the open, park so that the wind approaches from the right, pushing the bike onto the kickstand. Don’t leave your helmet loose on the seat or someplace where the wind can blow it and cause damage.

Riding in the wind is very tiring. Take more frequent breaks, stay hydrated, and wear ear plugs to mitigate the wind noise. Relax, enjoy the challenge of the wind, and ride safely.

Ernie Staples Sr., Safety Officer
May 2016