

## Thoughts on Helmets

There has been a lot of talk around the water cooler lately about helmets, especially since R.T.'s very serious crash down in Laughlin. There are some of our brothers that swear that R.T. would not be here today if it wasn't for his helmet and after it showed up at the clubhouse and I got a look at it, I would have to agree. That helmet definitely took a good beating, yet the inside was still for the most part intact. I don't know how many guys took a close look at it, but inside the helmet is a little sticker that says **SNELL**. I'll be honest with you, I had all ready been doing research on helmets because I wanted to dispel the rumor that you had to spend \$500 to \$700 to purchase a good helmet. That is a lot of money, especially since many of you ride 2 up and may be buying two helmets. Well the more googling that I did, the more trouble I got myself into. How was I going to put all the info that I was collecting on paper and still keep the attention of the few guys that do read the newsletter? Well I got lucky. I found an article by Lucas Burt which basically sums up all the safety stuff that I wanted to talk about. Please see the article below. Additionally, I found an excellent helmet for less than 150 bucks. Check out [www.thebellstore.com](http://www.thebellstore.com), click on the street bike and scroll down to Pyroprotect full face.

**Head Games: DOT vs. SNELL 6/30/2004** *By Lucas Burt* A helmet is the most important piece of motorcycle protective equipment one can wear. Regardless of how good a rider thinks he or she might be, it's nearly inevitable they will take a spill at some point in their riding career. Even a seemingly harmless crash can cause damage to the brain, which could be fatal. In order to avoid such injuries, riders should not only wear helmets, but make sure that the helmets they use meet safety regulations. The two organizations we are most familiar with for helmet certification are the Department of Transportation (DOT) and the Snell Memorial Foundation (SMF). There are several key differences between these two standards that should be taken into consideration before purchasing a helmet. In 1972 the National Highway Traffic Safety Administration announced that they were going to develop a standard for motorcycle helmets. The Federal Motor Vehicle Safety Standard 218, commonly referred to as the DOT standard, was written using information and methodology that was developed several years earlier. The initial draft was supposed to be revised before its release in 1974, but the changes were never made. Although the DOT standard could use some alterations, it still provides for a safer helmet than one that has not been DOT approved. The Snell Memorial Foundation on the other hand was formed in 1957 after William "Pete" Snell, a race car driver, died from massive head trauma he sustained in a racing accident. The non-profit organization focuses on learning more about the components of head injuries, and how to prevent them by using helmets. Through their research the foundation has developed a standard for approving helmets that is continually tested and updated every five years. There are two key differences between a DOT- and Snell-approved helmet. First, is the testing standards the helmets go through, and second, is the verification of the results. It's easy to get lost in the scientific jargon when trying to sift through the testing process of both standards. Simplified, DOT and Snell assess each helmet by placing it on a head form that is equipped with sensors. The helmeted head form is then dropped from a specific height onto a steel anvil, and the severity of the impact is recorded. Both standards drop the head forms on flat and hemispherically shaped anvils in order to simulate different types of impacts. However, Snell also uses an edged anvil that specifically tests the integrity of the helmet's shell. DOT and Snell test each helmet two times at four different impact zones. DOT drops their helmets from a 6-foot height on the flat anvil and from a 4.5-foot height on the hemispherical anvil. Snell on the other hand, drops the helmets from a 10-foot and 7.5-foot height on both anvils, which simulates a more severe impact. Although their testing process is very similar, SMF

requires their certified helmets to withstand a greater impact and absorb more force than the DOT standards. In order for a company to claim that their product is Snell approved, they have to submit five helmets for testing. Four of those helmets are tested and one is saved as a sample product. If the helmet design passes the tests, the manufacturer enters into a contract with Snell. This contract allows SMF to buy helmets from the manufacturer and test them on a continual basis in order to ensure quality. DOT certification, however, is less regulated. The manufacturer performs their own tests and determines whether their helmets are DOT approved. Even though the manufacturer doesn't have to report their findings, the government does occasionally conduct limited tests or spot checks. Nevertheless, allowing each company to test their own equipment and not make them report their results means that the DOT certification is done by the honor system. In 2001, DOT performed one of their spots tests on 40 helmets. There was a 20 percent failure rate with the AFX, Fulmer, HJC, M2R, NEXL, and THH helmets. Again, after the data was published, it was up to the manufacturer to bring their products into compliance. While there's no guarantee a DOT-approved helmet has actually been tested, the purchase of a Snell-approved lid ensures that the product has been evaluated under scrutiny. A Snell-certified helmet also meets and exceeds the DOT standards. The DOT standards are important because they outline the minimum requirements all motorcycle helmets must meet, which has already saved countless lives. But if you want to make sure your helmet has been tested impartially, then buying a helmet with the Snell sticker on it is a dependable alternative. As a side note, it's important to remember that a helmet is only designed to withstand one crash. Even if the outer shell has not been cracked, the protective foam inside the helmet may have been compressed. When a helmet comes into contact with a blunt object, the shell disperses the energy of the impact while the foam absorbs the remaining force. If the foam is already compressed from a previous wreck, it cannot adequately absorb the energy from a new impact. This dramatically increases your chances of serious head trauma. Finally, you should buy a helmet that fits you properly. It sounds simple enough but is often disregarded. A loose fitting or uncomfortable helmet can not only be a distraction while riding, but also offers less protection and has a greater chance of coming off during a crash.

Spanky