## **New Technologies Bring New Rules**

In the 2008 Beijing Summer Olympics, swimmers set 25 new world records – an unprecedented number. Many claimed that the faster swim times were produced by the new LZR (read "laser") Racer swimwear, introduced by Speedo in February 2008 and first tested competitively

in Beijing. The suits were designed for speed: welded seams to reduce drag, improved oxygen flow to the muscles, trapped air to improve buoyancy, and streamlined fluid flow around the body. Multiple medal winner Michael Phelps said the suit made him "feel like a rocket."



Michael Phelps at the Introduction of the LZR Racer, 2008

In 2009, FINA (International Federation of Water Sports) created new rules for competitive swimwear, in effect outlawing the LZR Racer and other body-length suits. Officials had decided that these suits unfairly **varied** buoyancy and drag. They argued that the suits made otherwise less competitive swimmers perform at a higher level that did not reflect their true athleticism. The rules were meant to **control** for outside factors, ensuring that athletes performed according to their actual fitness and skill.

Is it **fair** that new technologies in swimwear should be outlawed? After all, swimwear used in competitions has

gotten more streamlined at each of the modern Olympic competitions. In 1896, at the first modern Olympic games, men and women wore woven wool bathing suits. Annette Kellerman was arrested in 1907 at Revere Beach for wearing a one-piece suit! In 1912, the women's British team members were considered quite shocking because of their streamlined suits.

Until 1936, men swam in the Olympics in two-piece suits with their chests covered. The development of the one-piece suit for both men and women was associated with faster swimming times. Swimmers also began a **process** of using caps to cover their hair and shaving their bodies to reduce drag. At the 2000 Sydney Olympics, swimmers first wore bodysuits made of synthetic fibers said to be smoother than shaved human skin. They were widely adopted and are still allowed.

Swimmers and swim companies frequently come up with new ways to improve speed. Every new swimsuit design has been associated with faster times and better performance. So why did FINA suddenly decide that the newest generation of improvements in swimwear technology should be outlawed? Was that **fair** to the swimmers who had to go back to older, slower suits? Was using the new suits **fair** to the previous generations of swimmers who had to swim in the older-style suits and whose winning records were eclipsed? Should we still be swimming in woven woolen suits to keep everything **fair**?



