



# Mike Burrows

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MCEN 5279



# Background

- Born in Coventry, England in 1943
- Family involved in bicycle industry at Triumph Cycles
  - Father aircraft designer
  - Sculpting and sailing hobbies
- Began racing bikes at an early age
- Developed interest in recumbent bicycles
- Started constructing custom recumbent bicycles as a hobby in 1980



# Early Bikes

- Used “soft design”
  - No computer aided design
  - Trial and error/user experience
- Pioneered recumbent bicycles - Windcheetah (late 1970s)
- Experimented with carbon fiber, fiberglass, titanium
- Early 1980s - began partnering with Lotus and Giant bicycles





# Giant TCR

- “Total Compact Road”
- Developed in 1990
- Pioneered the use of oval tubing for added strength
- Refined bike geometries to make them more universal in size
- Adapted designs from both mountain and road bikes
- Released the Giant TCR in 1997 to acclaim





# Giant MCR

- “Multi Condition Road”
- Introduced in 1999
- Multi-purpose bike
- Compliant suspension system
  - Design still used in modern bikes
  - Integrated into “rear triangle”
- Hydroformed Al frame
- Used in road racing, touring, gravel, commuting





# Lotus 108

- Designs by Burrows for the 1992 Barcelona Olympics
- One of the most successful racing bike of all time
- Inspired by streamlining and aerospace design
- Carbon fiber construction
- Won award for most innovative bike of the year



# Other Notable Designs



# Recent Designs

- Folding city bike
- Ratracer recumbent bicycle
- Velocite Syn aero road bike





# Sources

<https://www.designweek.co.uk/issues/7-11-november-2022/mike-burrows-greatest-bicycle-designer/>

[https://www.cyclingtips.com/2022/08/mike-burrows-was-much-more-than-just-a-legendary-bicycle-designer/#\\_pay-wall](https://www.cyclingtips.com/2022/08/mike-burrows-was-much-more-than-just-a-legendary-bicycle-designer/#_pay-wall)

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