



Sixty minutes to break the limits
of human endurance.

47.43 Kilometers.

The new official UCI World Record.
Men's Age 60-64 Category.

Set by Peter Megdal, PhD. Aguascalientes, Mexico.

CONTACT POINT

A WORLD RECORD DECIDED BY THE WEIGHT OF SIX PAPER CLIPS.

The Margin of Victory: Beating the previous 2021 record required overcoming an incredibly precise amount of aerodynamic drag pushing backward.

The output difference between failure and history was less than 10 grams of pressure, yielding a final margin of just 70 meters over the entire hour.



THE PSYCHOLOGICAL PARADOX OF TIME-BASED RACING.

DISTANCE-BASED RACES



Cover a set distance as fast as possible.

The faster you run, the sooner the pain ends.

A mass start against hundreds of others.

Pacing for a physical finish line.

THE GOAL

THE REWARD FOR SPEED

THE COMPETITORS

THE MENTAL MODEL

THE HOUR RECORD



Cover as much distance as possible before the clock hits 60:00.

The harder you pedal, you simply endure more pain for the exact same duration.

Solo on the track. You versus a countdown.

Enduring a rigid, inescapable block of time.

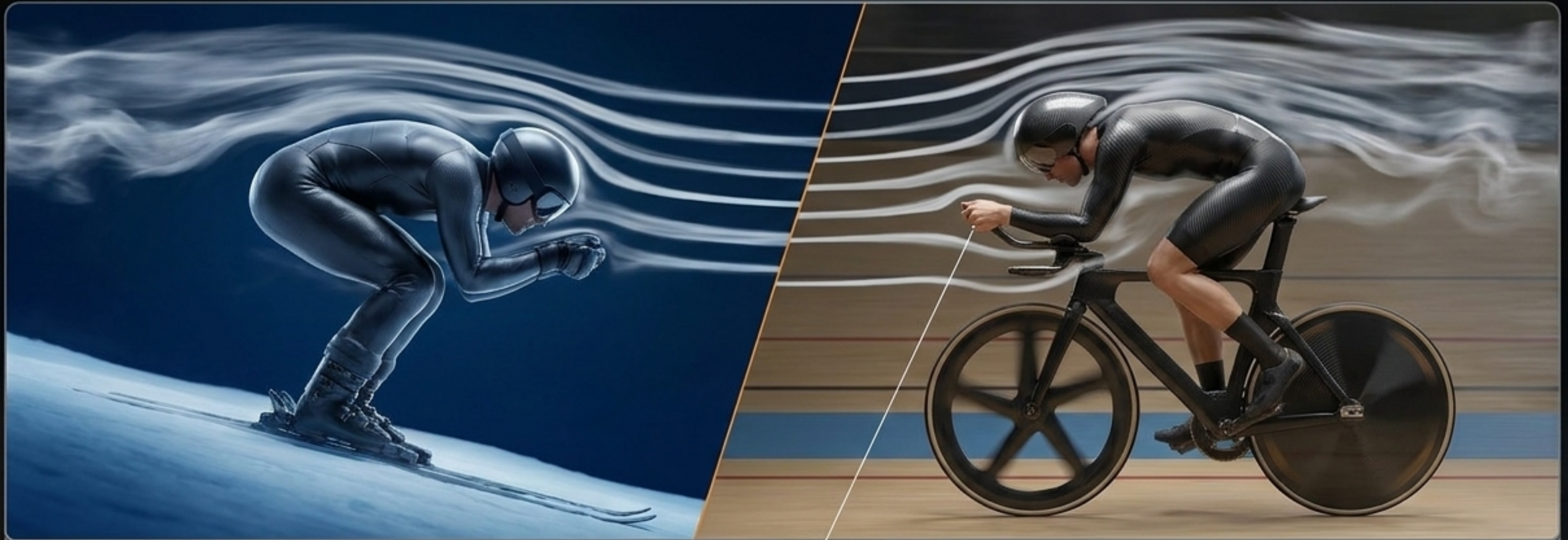
CALCULATING THE ATMOSPHERIC SWEET SPOT

Aguascalientes Velodrome, Mexico



FORCING THE HUMAN BODY INTO AN AERODYNAMIC BULLET.

The specialized track bike forces the rider's hands straight out in front.



To overcome wind resistance at 47 kilometers per hour, the rider must adopt the exact aerodynamic profile of a downhill skier—but while violently turning the pedals 90 times a minute.

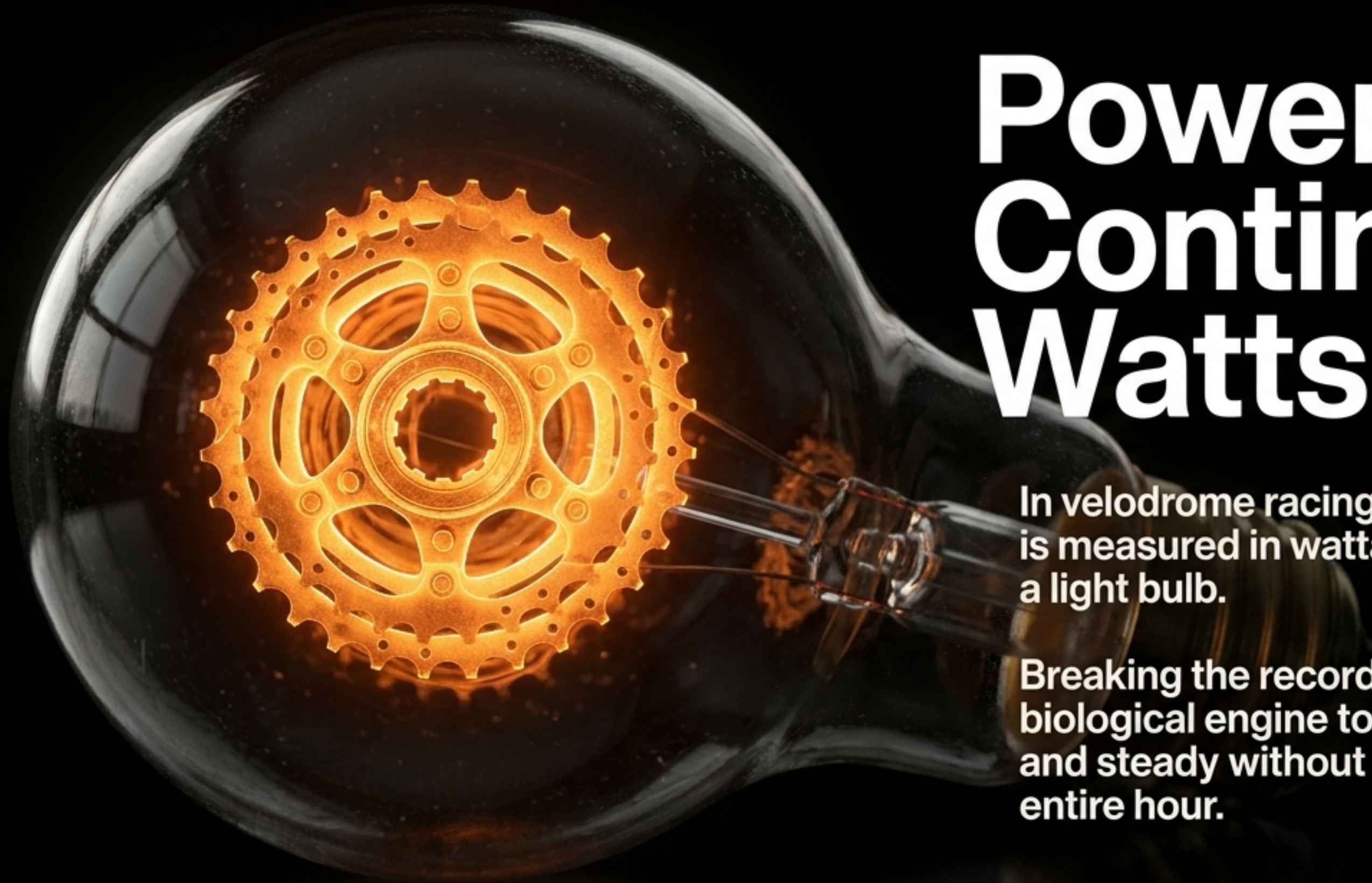
Every element is optimized for slipstream: tires, wheels, helmet, and skinsuit.

Sustaining the wattage of a burning filament for 3,600 seconds.

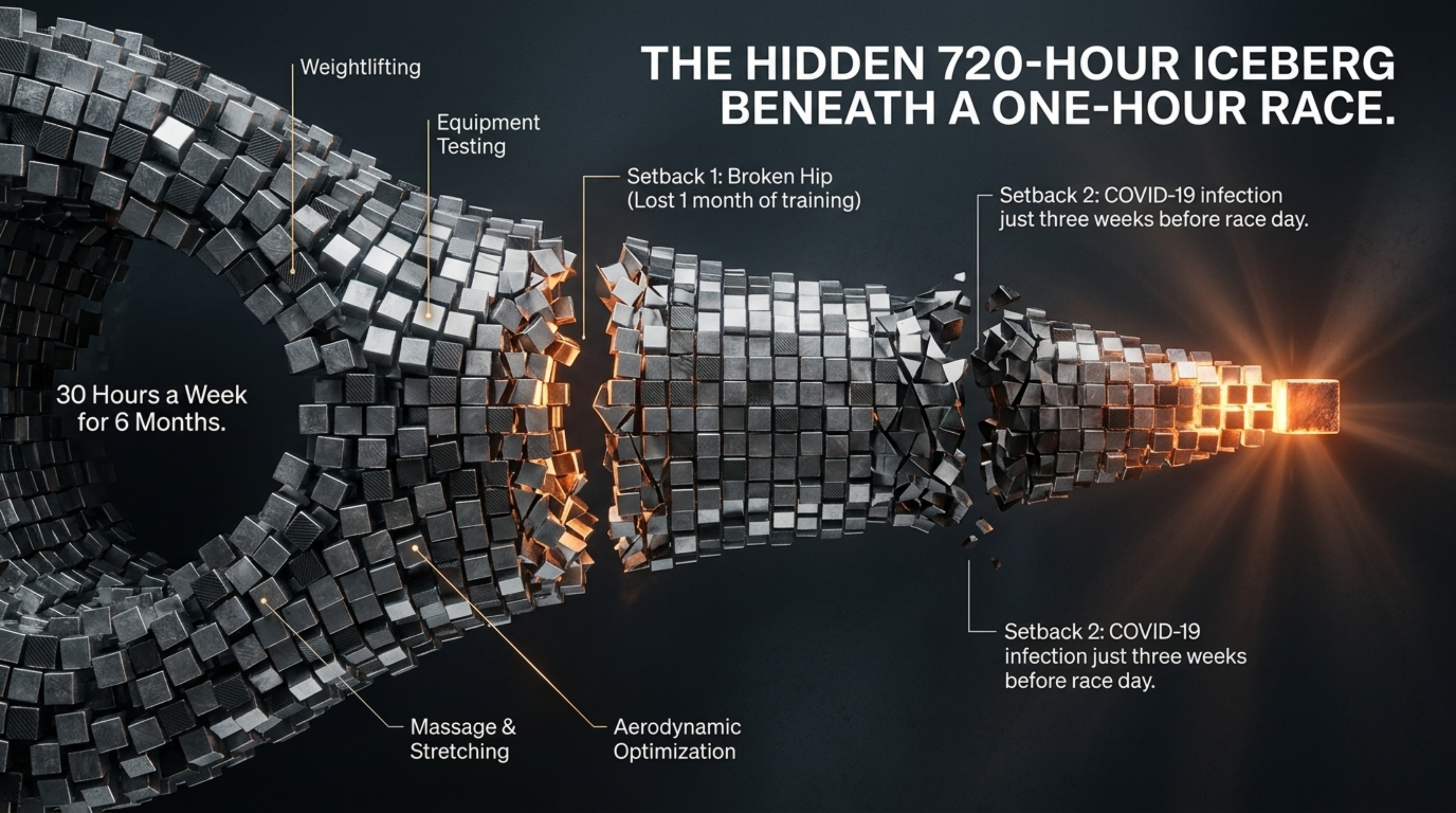
Power = Continuous Watts.

In velodrome racing, human effort is measured in wattage—exactly like a light bulb.

Breaking the record required the biological engine to burn bright and steady without flickering for an entire hour.



THE HIDDEN 720-HOUR ICEBERG BENEATH A ONE-HOUR RACE.



Weightlifting

Equipment
Testing

Setback 1: Broken Hip
(Lost 1 month of training)

Setback 2: COVID-19 infection
just three weeks before race day.

30 Hours a Week
for 6 Months.

Massage &
Stretching

Aerodynamic
Optimization

Setback 2: COVID-19
infection just three weeks
before race day.



57:00

Minute 57: When the science completely collapsed.

Riders are forbidden from having computers or speedometers on the bike. They rely entirely on trackside support holding up timecards.

Tied with the world record. Three minutes remaining. The support team, overwhelmed by the excitement, forgets to show the timecards.

Cramping begins. The data feed is gone. Only a blind, agonizing sprint to the finish remains.

THE SCIENCE

WATTAGE OPTIMIZATION

AERODYNAMIC SHELL

DRAG COEFFICIENT: 0.12

BIOMECHANICAL LEVERAGE

1000, 150, 480, 700, 1730, 608, 350, 1100, 16, 4E, 0.12

Data gets you to the top. Lance Armstrong's 2004 Tour de France victory was a triumph of scientific perfection. The bike he rode was a masterpiece of engineering, designed to reduce drag and maximize power. The aerodynamic shell was optimized for a drag coefficient of 0.12, and the wattage optimization was designed to maximize power output. The biomechanical leverage was designed to maximize the efficiency of the rider's pedaling motion. The final 70 meters of the race were a testament to the power of science.

Data gets you to the starting line. Heart crosses the finish. The pursuit of a world record requires absolute scientific perfection. Every millimeter, gram, and watt is calculated to beat the wind. But in the final, blind minutes of the hour, the technology fades away—leaving only raw human grit to pull those final 70 meters out of the dark.

A cyclist in a brown jersey and black helmet is shown in a side profile, riding a road bike. The cyclist is wearing a brown long-sleeved jersey, black shorts, white socks, and white cycling shoes. The bike is black with a white front fender. The background is dark. Overlaid on the image are several white technical diagrams, including a large circle with a radius of 200, a line labeled '100', and a line labeled '200'. The text 'THE HUMAN' is written in large, bold, white capital letters at the top right. A white rectangular box on the left side contains the text: 'the starting line. finish. The pursuit requires absolute n. Every millimeter, alculated to beat the al, blind minutes of ology fades away— n grit to pull those out of the dark.'



47.43 Kilometers

The new standard for human endurance.

Peter Megdal bypassed a broken hip, a COVID infection, and the agony of the Hour to redefine what is possible in the 60-64 age category.