

FABRIC

# The Jacket You Can Beat Up

By adding in the same material that allows flak jackets to stop bullets, one company is giving duck cloth—the sturdy standard-bearer of work-wear fabrics—a marked improvement. **BY MATT GOULET**

In 1965, a chemist at DuPont named Stephanie Kwolek was searching for a lighter alternative to replace the steel used in reinforcing racing tires. In the lab, she discovered a liquid crystal polyamide that when spun into a fiber was five times stronger than steel at the same weight and lighter than nylon—DuPont's first commercially successful synthetic fiber. The chemical name for Kwolek's compound was poly-para-phenylene terephthalamide. DuPont called it Kevlar.

Since then, it has become synonymous with the tactical bulletproof vests worn by military and SWAT teams, saving thousands of lives since the body armor was introduced in 1975. Kevlar is also found in conveyor belts in coal mines, NASA spacesuits, cellphone cases, motorcycle pants, and hockey socks that can last longer than their smell ought to allow.

And now: the Kevlar work jacket for the man who likes to work. Work jackets have been made largely of traditional cotton duck cloth ever since Carhartt began manufacturing clothes for railroad workers at the end of the 19th century. By weaving Kevlar into the lengthwise threads of its duck cloth, a company called Walls in Fort Worth, Texas, has made a jacket that, while not exactly bulletproof, can withstand the rigors of weekend chores and a construction site alike.

We took a metal file to the elbows of the new Walls Workwear Muscle Back Coat for ten minutes and came away with nothing but minor pilling and a sore arm. Finally, all the hard work you put into breaking in a jacket won't actually break it.

→ Walls built its reputation making coveralls for oil-rig workers. Now it's on to basic work jackets and hunting gear.



THIS MONTH IN WEIRD MATERIALS

Tidal Vision, out of Alaska, is attempting to close the loop on commercial-fishing by-products by purchasing discarded crab shells from sustainable fisheries and extracting chitosan. The fiber—known for its antibacterial, antimicrobial, and antifungal properties—is spun into the yarn of Tidal's moisture-wicking T-shirts, making strange but effective use of the aftermath of your next surf-and-turf night.

**GREAT MOMENTS IN KEVLAR**

1973

Canoes made of Kevlar.



1975

The National Institute of Justice sponsors the first field tests of Kevlar-impregnated body armor.

1978

Adopted in U.S. Army flak jackets and helmets.



2006

The shield on NASA's Pluto-bound New Horizons probe.



2008

The Ove Glove.

