



Transcription for:

Whirlwind Wheelchair on PBS NewsHour with Jim Lehrer reported by Spencer Michels

Jim Lehrer: Spencer Michels reports from San Francisco on one man's mission to send specially-designed wheelchairs around the world.

Ralf Hotchkiss: Not only do they need a wheelchair, but they need the best of wheelchairs because they have the worst of terrain.

Jim Lehrer: Next tonight: delivering mobility for those most in need. NewsHour correspondent Spencer Michels reports.

Offscreen: Wait wait wait, we need a...

Spencer Michels: The heart-wrenching scenes from the earthquake in Haiti — the pictures of Haitians with crushed or missing limbs — have inspired a special kind of response from thousands of miles away.

Ralf Hotchkiss: You can see people with new disabilities every day, and we knew already there was a great shortage of wheelchairs in Haiti.

Spencer Michels: Ralf Hotchkiss rides his own wheelchair around the campus of San Francisco State University, where for 22 years he has run a nonprofit that develops sturdy, low-cost wheelchairs for underdeveloped nations and arranges for their distribution. With estimates of more than 2,000 amputations in Haiti, Hotchkiss's contacts there in the disabled community let him know immediately that thousands of Haitians would be needing the kind of chair he and his colleagues at Whirlwind Wheelchair International have built and improved and distributed around the world.

Ralf Hotchkiss: We're having, so far, 350 chairs made in Vietnam and Mexico, and all sent to Haiti to be distributed to people both with spinal cord injuries and with amputations, usually dual amputations, who absolutely have to get mobility soon before it's too late.

Spencer Michels: What they'll be getting, courtesy of non-governmental organizations, are wheelchairs priced at about 200 dollars, manufactured in small independent factories around the world. Those chairs are designed in this mechanical engineering lab in San Francisco, which is where Hotchkiss and his staff teach design and construction.

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Ralf Hotchkiss: What we're going to start out with tonight is hand-rim bending.

Spencer Michels: Hotchkiss got involved 44 years ago after he was paralyzed in a motorcycle accident. He learned fast that wheelchairs, even ones that cost several thousands of dollars, weren't very practical.

Ralf Hotchkiss: My first wheelchair lasted me half a block. The front wheel was then ripped off by hitting a crack in the sidewalk. It was beyond repair.

Spencer Michels: As an engineer he began studying and observing wheelchairs.

Ralf Hotchkiss: We started at the end of 1979 in Nicaragua. I met some young fellows who were sharing one wheelchair. I was riding a handmade, fairly high-tech chair at the time. They looked at my chair and said, "We know it is going to break in a couple of places." I knew they were right.

Spencer Michels: He got some funding to do research and started working by hand, putting together parts like bicycle tires to make the chairs stable, more durable, and more useful in the tough terrain that is so prevalent in third-world nations. His latest model, the RoughRider, is in use in many poor countries; and in fact 50,000 Whirlwind wheelchairs have been bought over the years by nonprofit groups and then given away.

Spencer Michels: Hotchkiss and his staff test the theories on hills and in flower beds near the college science building.

Ralf Hotchkiss: There are parts of it that require the same skills that are required to go over unpaved roads and up and down rugged trails. Our chairs have a much longer length between the front and rear wheels than on a typical chair. We've tucked the footrests behind the front wheels instead of hanging them way out in front like a cowcatcher. We've also gone to mountain bike rear tires; thank goodness, those are more and more available all over the world. And there's no way you can break it. It's got a bicycle hub in the middle; very cheap, very available.

Spencer Michels: Whirlwind wheelchairs are easily repaired and modified; key elements in the poor nations. Hotchkiss insists that everyone in his class and on his staff — most are not disabled — ride a wheelchair.

Spencer Michels: Laura Hunt is a senior majoring in anthropology.

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Laura Hunt: It's definitely made me realize that accessibility is a completely different world. Unless you are in a wheelchair and get firsthand experience, you don't often think of the small things; like being able to get to the napkins in the dining center, or finding a fork, or how steep the grade of the hill is on this campus.

Spencer Michels: For his role in raising awareness of the needs of the disabled, and for his efforts to fill those needs, Hotchkiss was awarded a MacArthur Genius Grant. His concern is worldwide. He says that Haiti's need for wheelchairs is hardly unique.

Ralf Hotchkiss: There are easily 25 million people in the developing world who need a wheelchair today and don't have one. And not only do they need a wheelchair, but they need the best of wheelchairs, because they have the worst of terrain and they go the longest distances. No cars, no busses with lifts; they have to go miles to get to work, to school.

Spencer Michels: As Hotchkiss and his crew work to get RoughRiders to Haiti and other Third World nations, they are also looking to bring durable, inexpensive wheelchairs made in Vietnam and Mexico to the United States at a cost disabled Americans can afford; well below what they pay today.

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