

# TIMES ONLINE

UK News

World News

Politics

Environment

Weather

From The Sunday Times

## **Bill Gates in bid to tame hurricanes**

**July 19, 2009**



The world's richest man has joined the battle against the world's most destructive weather. Bill Gates, the co-founder of Microsoft, is backing inventors and climate scientists who claim to have devised a technique for diminishing the power of hurricanes.

Gates was named last week among a group of weather experts who have applied for patents on a system for lowering ocean temperatures. Using a fleet of barges equipped with pumps, Gates and his team believe a hurricane can be slowed by cooling the tropical waters that fuel its progress.

American scientists agreed last week that the system was theoretically feasible but several noted that its backers had yet to prove it could be managed on a scale that would have any serious effect.

“Is it plausible? Yes,” said Frank Marks, director of hurricane research at the National Oceanic and Atmospheric Administration. “Is it possible? Maybe. Realistic? I just can’t answer that.”

The plan calls for a line of barges to be scattered along the coastline of the United States, ready to be deployed in a hurricane’s path. Each barge would have a pair of tubes that thrust warmer surface waters to cooler depths while sucking up colder water.

Hurricanes gain momentum from the heat energy released by warm, humid air evaporating on the water’s surface, so the idea is that the hurricane’s force would be reduced.

“The bottom line here is that if enough pumps are deployed it is reasonable to expect some diminution of hurricane power,” said Kerry Emanuel, from the Massachusetts Institute of Technology. He estimated that a hurricane might be stopped in its tracks if the ocean could be cooled by 4.5C.

As the world’s most successful entrepreneur, with the world’s biggest private fortune, Gates is no stranger to daunting challenges. The \$35 billion (£21 billion) charitable foundation he set up with his wife, Melinda, is also trying to eradicate polio and malaria in the Third World.

Yet critics are already wondering if he has fully thought through the implications of trying to control the weather. His patent applications refer to “atmospheric management, weather management, hurricane suppression . . . hurricane deflection”.

“What if the system works and he succeeds in deflecting a Florida-bound hurricane towards Cuba?” asked one Miami scientist. “Would that be seen as an act of war?” Others wondered about the ecological consequences of radically altering ocean temperatures.

Numerous attempts to control the weather have been made around the world. During the Vietnam war, the Pentagon launched Operation Popeye, a partially successful attempt to extend the monsoon season over Laos to bog down North Vietnamese troops advancing through the jungle.

Gates’s applications do not spell out how his scheme would be paid for. But analysts said insurance companies and the American government might be keen to invest in research that could save at least some of the \$10 billion in damages inflicted on the United States each year by hurricanes.

Print

Copyright 2009 Times Newspapers Ltd.

This service is provided on Times Newspapers' standard Terms and Conditions. Please read our Privacy Policy. To inquire about a licence to reproduce material from Times Online, The Times or The Sunday Times, click here. This website is published by a member of the News International Group. News International Limited, 1 Virginia St, London E98 1XY, is the holding company for the News International group and is registered in England No 81701. VAT number GB 243 8054 69.