

Disabled Japanese tourist plans robo-suit adventure

September 16 2010, by Harumi Ozawa



Japan's robotics venture Cyberdyne employees wearing the robot-suit "HAL" (Hybrid Assistive Limb) are pictured walking in Tokyo during a demonstration. A Japanese paralympian and adventurer says he wants to conquer a French medieval World Heritage site set on a rocky island next year with the help of the cutting-edge robotic suit.

A disabled Japanese adventurer says he is planning to leave his wheelchair behind and walk up a medieval French World Heritage site next year with the help of a cutting-edge robotic suit.

Seiji Uchida, 48, who lost the ability to walk in a car accident 27 years ago, said he has long dreamed of visiting the picturesque abbey of Mont Saint-Michel, set on a rocky islet in Normandy.

Now, in a challenge planned for next summer, he aims to do so with the help of a [robot suit](#), called the Hybrid Assistive Limb (HAL), which works like an [exoskeleton](#) and amplifies the muscle power of its wearer's legs.

Battery-powered HAL -- designed to help the elderly with mobility and manual work and to assist hospital carers in lifting patients -- detects muscle impulses to anticipate and support the user's [body movements](#).

A full-body model of HAL, being developed by Tsukuba University professor Yoshiyuki Sankai, assists both arms and legs, and allows users to carry a load of up to 70 kilograms (154 pounds) with one arm.

Uchida and a support team used an earlier version of the suit in an unsuccessful attempt to conquer the 4,164-metre (13,661-foot) Breithorn peak in Switzerland in 2006, when climbers wearing the robo-suits carried Uchida.

Uchida says he wants to visit the rocky tidal island of Mont Saint-Michel where a steep and narrow trail lead to an abbey and former fortress to "prove that it is possible for disabled people to visit the world's historic sites without relying on facilities like elevators," he said.

(c) 2010 AFP

Citation: Disabled Japanese tourist plans robo-suit adventure (2010, September 16) retrieved 30 April 2024 from <https://phys.org/news/2010-09-disabled-japanese-tourist-robo-suit-adventure.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--