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This massive oil rig had a wicked list in the Gulf of Mexico last summer when Great Village resident Mark Wood was called in to lend a hand fixing the problem.

Mark Wood's **BIG EARS** ARE BEING HEARD AROUND THE WORLD

BY JOHN CHRISTIANSON |

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GREAT VILLAGE

Ssshhh!

He's listening.

A Great Village inventor stepped on to the international stage by saving a billion-dollar oil rig just by hearing what others couldn't.

Mark Wood, electrical engineer and inventor, was snatched from his July holidays last year as the world's largest semi-submersible oil rig, Thunderhorse, listed dangerously in the Gulf of Mexico after hurricane Dennis.

You'd have to be a rocket scientist to figure out what was making the big rig list in the ocean, but in fact, a U.S. based company called Rocket Science Acoustics of California couldn't find the problem.

Wood's invention, Big Ears, lived up to its name and found the source that threatened to capsize the rig.

"There really isn't another

instrument that does what Big Ears does," said Wood at his Great Village storefront.

The instrument has been eight years in the making and can survive working at 3,500 metres under water. At that depth, Big Ears can hear noise coming from a pin hole in a container that has a differential pressure of 50 PSI. In the oil business, engineers are used to pressures of 100 to 10,000 PSI, so Big Ears is very sensitive indeed.

"Thunderhorse was unique because there was no standing by," he said. "We had to go right away."

Normally, investigators would spend weeks looking for anomalies in underwater rigs.

The invention is remarkably nondescript. A green computer circuit board fits into a 30-centimetre-long aluminum cylinder and a hydrophone (under water microphone) is attached to the end of a 1.3-metre cable.

The brains of the matter is in a program called Lucy, named after the extraordinary discovery of a human ancestor by Richard Leakey in 1969 in Africa.

"(Leakey) found it almost like a needle in a haystack ... Lucy does the same with leaks."

Big Ears has brought notoriety and business opportunities to Wood and his partner Desirée Stockermans. But his business, Instrument Concepts, isn't just about offshore eavesdropping. Wood also develops unique instruments for the heating, ventilation and air conditioning industry.

So, why does this inventor and business man make his home in the unassuming community of Great Village instead of Houston, Texas, the oil patch capital of North America?

"Their summer is hot and unbearable," said Stockermans.