

Paint and bombs try to save ships from Titanic fate

April 6 2012, by Mariette le Roux



File picture shows icebergs floating off Greenland. We've painted them, tagged them, bombed them, monitored them with radar and watched them from space -- but icebergs like the one that sank the Titanic are still a threat to ships today.

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Scientists say that despite a century of technological gains, ships rely heavily on a detection method as old and as fallible as sailing itself ... the eyeball.

"Icebergs are very dangerous objects because they drift, they are not stationary, and in higher wave conditions they can be masked or hidden

from a ship's radar. That's why they are still a danger today," says Michael Hicks of the International Ice Patrol (IIP).

Icebergs can be stealthy leviathans, veiled by rough seas, fog or low light.

"There are still invisible threats," says Hicks.

The odds of hitting an iceberg today are about one in 2,000 -- twice as remote as they were in April 1912 when the greatest ship of its time took 1,514 people to a watery grave, estimates Brian Hill, a specialist with Canada's National Research Council (NRC).

On average two iceberg collisions occur each year, and a near-disaster involving a [cruise ship](#) in 2007 showed that an unsinkable vessel has yet to be built.

Formed in 1913, the year after the Titanic's demise, the IIP patrols half a million square nautical miles (1.7 million sq. kilometres) of the northwest Atlantic.



A lifeboat from the SS Titanic is pictured at National Geographic's "Titanic: 100 Year Obsession" last month in Washington, DC. Scientists say that despite a century of technological gains since the Titanic was sunk by an iceberg, ships

rely heavily on a detection method as old and as fallible as sailing itself ... the eyeball.

Its beat includes "Iceberg Alley," the [shipping lanes](#) off the Great Banks of Newfoundland and the east coast of Labrador where icebergs, breaking off from Greenland, prowl between February and July.

The agency has resorted to unorthodox measures in its attempts to track the wandering giants.

It tried to paint icebergs red, but the colour washed off.

It tried to drop [radio transmitters](#) on them -- a mighty task for a plane flying over at up to 180 knots (350 kilometres per hour).

It even tried bombing. In 1959, IIP planes battered an iceberg 220 feet (about 70 metres) high and 475 feet (145 metres) across with 20 1,000-pound (400-kilo) bombs, 18 of which hit their target.

"Just a few pieces broke off," says Hicks. "It didn't have much effect."

A later attempt to detonate explosives planted inside an iceberg was slightly more effective, "but all it meant was that instead of one big iceberg to track we suddenly had several smaller ones which are just as dangerous," says Hicks.



File picture shows the 'MV Explorer' cruise ship, previously called the Lindblad Explorer, which sank November 23, 2007 after striking an iceberg off the Antarctic. We've painted them, tagged them, bombed them, monitored them with radar and watched them from space -- but icebergs like the one that sank the Titanic are still a threat to ships today.

So the IIP switched all its efforts to early warning.

It deploys radar-equipped Hercules aircraft and collates reports from passing ships and satellites.

Not a single skipper who heeded its warnings has hit an iceberg, says Hicks proudly.

Man has huge faith in space technology, but satellites are of limited value here as they cannot tell smaller icebergs from ships.

"There is always a visual recognition issue and for very small icebergs there is always going to be that residual risk," said Mark Drinkwater, a cryosphere expert at the European Space Agency (ESA).

According to the Ship Iceberg [Collision](#) Database held by Canada's NRC, there has been a steady decline in incidents since 1913.

There were 57 iceberg collisions in the northern hemisphere from 1980 to 2005, an average of 2.3 per year -- down from 170 hits or 6.8 per year in the 25 years up to 1912, adds Hill.

The last passenger ship to sink with fatalities after hitting an iceberg was the Hans Hedtoft, which went down off southern Greenland in January 1959 with 95 people on board.

In November 2007, the cruise ship MV Explorer sank after hitting an [iceberg](#) off the Antarctic Peninsula's northern tip. All 100 passengers and 54 crew were saved.

Hill says good luck with the weather and a passing ship prevented a catastrophe in that case.

Human error means a disaster on the scale of the Titanic can happen again, adds Hicks.

"There are still icebergs, there are still ships," he says.

"Despite all warnings that you give, ship captains are out there still trying to make the shortest possible crossing, trying to keep to the schedules."

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