When a cruise ship is in peril at sea, imagine the relief of the passenger who safely boards one of the little lifeboats mounted to the side of the vessel. The worst is over – that is, unless something goes wrong with the lifeboat.

Equipment used for emergencies should be failsafe. Yet hundreds of people have died in lifeboat emergencies or drills over the years, in an estimated 1,200 incidents. In the late 1990s, the Institute of Ocean Technology hired Dean Pelley and Jason Dawe to find out why.

They discovered that lifeboats weren’t the problem. The problem was in the hooks that release the lifeboats from the vessel. Someone had to invent a simple, durable and reliable hook, so Dean and Jason took on the task.

Today Dean is CEO of Mad Rock Marine Solutions, Inc., a growing company based in St. John’s, Newfoundland, and Jason is the company’s Executive Vice President of Engineering. They launched their failsafe RocLoc hook in 2004.

Manufacturers of lifeboat hooks have faced tough challenges over the years. In the 80s, after 123 people lost their lives when three out of four lifeboats failed to release from a Norwegian oil platform, the IMO made it mandatory for lifeboat release gear to have on-load release capability. Unfortunately this resulted in hooks that, if not properly maintained or operated, could open at the wrong time – with the lifeboat still suspended above water.

“Hook systems in the past killed more people than they saved. They would open at any given time,” says Lacee Abbott, Mad Rock’s Business Marketing Sales Support Specialist. “When you have a lifeboat full of people and the hook fails, the fall from any height above 3 m (9.8 ft) will cause the boat to suffer significant damages, and the people inside would be seriously injured, if not killed.”

Mad Rock’s RocLoc hook is a pure on-load release mechanism that requires no extra equipment or complex override processes, other than required by LSA Code. The weight of the lifeboat keeps the hook closed even if there is a problem with one of the system’s components. The RocLoc will not open until a crewmember opens it. It has only two moving parts, including a cam system featuring Thordon bearings in the cam’s rotation.

Historically, poorly designed cam systems had caused many hooks to fail. So when Mad Rock was looking for the right bearing, the company had high expectations:

“The bearing had to have a long life span,” says Abbott. “Being in salty seascapes, it had to be corrosion resistant. It had to require low maintenance. It had to work every single time. We considered the Thordon product the best on the market for meeting all those criteria.”

The RocLoc is not only an ingenious, life-saving piece of hardware but a Canadian business success story. After achieving full IMO certification, Mad Rock sold its first RocLoc hook in 2006. Buoyed by the prospect of worry-free lifeboat release hooks, the cruise ship industry responded. Sales soared by three thousand percent by 2009, earning Mad Rock a place (twice, so far) on the Profit 100 fastest-growing companies list.

By eliminating injuries and fatalities due to lifeboat hook failure, RocLoc has become the release hook of choice for vessels all over the world. The cams with their durable, corrosion-free Thordon bearings are in place in Northern, Southern, Caribbean, Indian and Pacific waters, braced and ready to save the lives of unsuspecting cruise ship passengers everywhere.

Thordon bearings installed on RocLoc hook