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Penguin Ice Ladder

Pros

- + Durable;
- + Lightweight;
- + Easy to assemble and store; and
- + Adjustable base.

Cons

- None.

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Climb On In

The Penguin Ice Ladder enables fully suited divers to get in & out of the water quickly & safely

By Cliff Freer

Anyone who has tried getting out of the water wearing SCUBA gear—and hated it—is going to like Weeb Enterprises' Penguin Ice Ladder. Designed and built by Chris Smith, a firefighter/EMT from Indiana who has 7 years experience as a dive-team member, the Ice Ladder is a simple and durable solution that will make dive operations quicker and safer.

Smith recognized that during ice rescue operations, it can be extremely difficult to quickly get one diver out and another diver in the water. "The weight of the diver, their gear and slippery ice are an invitation for an accident," he notes. So Smith began devising an idea for a ladder that would hook to the ice shelf and enable a fully suited diver to climb out of the hole with no assistance. This would eliminate the need for additional support staff and, therefore, reduce the weight on the surrounding ice.

What he ultimately developed was a 65-lb. ladder constructed of marine-grade stainless steel. The Penguin

Ice Ladder is made of two pieces, the ladder itself and the locking circle, which can nest together, simplifying both storage and on-site transport.

The ladder is 8 feet long and designed to be submerged halfway, giving the diver plenty of ladder to ascend while in the water as well as plenty of ladder for support above the surface. The T-ladder design makes it easy to slide a finned foot in from the side; thus, the diver can wear their gear when exiting or entering the water.

The ladder's base is adjustable so it can work on ice between 2 and 22 inches thick. The two foot pads that serve as the connection between the ice and the ladder have teeth to dig into the ice for a solid grip and holes for the placement of ice screws. The ladder we tested (the original prototype) came with two ice screws, both with handles that can be placed or removed without the use of any additional tools (coffee grinder handles, for those who ice climb).

We used the Penguin Ice Ladder for 12 days of night diving. I know the ladder was designed for use on ice, but we found that it works very well on floating docks. (As of press time, there wasn't ice in our area yet, so we tested the ladder on a metal floating dock.) Additionally, Smith says his company can manufacture a mountable base section for swim platforms or boat access doors; this would make the ladder useful year-round. These brackets can be custom-made based on the type of boat and application.

Setting up the ladder is simple and straightforward and can be accomplished in less than 5 minutes. Separate the two nested pieces and place the base section in the area where you would like to use the ladder. Ensure the two foot pads are properly placed and supported, and tighten the locking handle. The handle has adjustable detents so it can be rotated

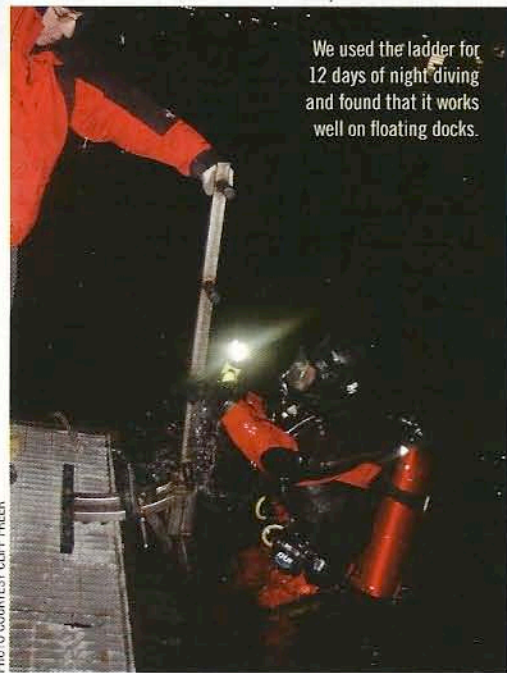
The 65-lb. Ice Ladder is made of two pieces, the 8-foot-long ladder itself and the locking circle.



PHOTOS COURTESY
 WEBB ENTERPRISES



The Penguin Ice Ladder hooks to the ice shelf and enables a fully suited diver to climb out of the hole with no assistance.



We used the ladder for 12 days of night diving and found that it works well on floating docks.

PHOTO COURTESY CLIFF FREER

for better leverage when tightening without losing tension on the screw. Slide the ladder section into the base section, push the bottom section into the water and you're ready to dive.

Note: When placing the base section, we found that placing the ladder at a pronounced angle to the water's surface made it easier for the diver to exit the water. The weight of the diver flexes the ladder back, sometimes too close to vertical, so the diver has to hold himself from falling backward. Placing the ladder at an angle offered additional stability.

Every night after diving, we'd break down the ladder, rinse it with fresh water and put it back in the truck for the next night. It never showed signs of wear and tear—with one caveat. The original test handle was made of plastic, and we broke it the first night. Smith immediately sent a replacement handle made of stainless steel, which all Penguin Ice Ladders will have.

The Penguin Ice Ladder, which costs \$3,000, certainly makes exiting the water very comfortable, even when tired. Plus, it is simple, durable and easy to transport and set up. Of course, I should also note that you should only use the ladder on good ice; it can't make bad ice safer, but it certainly can make it easier to get in and out of the water in an area with good ice. *Bottom line:* This is an investment that will offer years of hassle-free service and help simplify your ice rescue operations.

Cliff Freer has been with the FDNY for 8 years. His current assignment is covering lieutenant for 14 Division/FDNY SCUBA Unit. He is an avid tech and cave diver, and is a National Association of Underwater Instructors divemaster.

Challenge News

Big Winners!

Scott Firefighter Combat Challenge competitors finish strong in Las Vegas

By Paul O. Davis, Ph.D.

After covering more than 35,000 road miles and another several thousand by ship, the 2008 Scott Firefighter Combat Challenge World Championships concluded its 17th season under the world's largest TV—the 1,500-foot-long, \$100 million LG VivaVision canopy—at Las Vegas' Fremont Street Experience in mid-November.

More than 650 qualifiers from the 20 regional events and four countries marched onto the course at the opening ceremonies. The Las Vegas Fire Rescue Honor Guard and Pipe and Drum Corps (Local 1285) led the procession, adding a touch of tradition to the event.

Given the numbers of teams with regional times within seconds of each other, this year's predictions were anything but secure. Two-time defending champion Brandon Cunningham of Fort Gordon, Ga., seemed to be a safe bet for the individual title; but other than him, it was anyone's game.

In Friday night's team finals, the New Zealand contingent improved dramatically from their ranking last year, holding onto a top 5 slot for much of the evening's competition before finishing 15th overall. SAM Squad, the Department of Defense Fire Training Academy, had posted the top time of the season and won the U.S. Nationals, held 3 weeks earlier in Clayton County, Ga. The "Men in Black" team from Delta (B.C.) had won the Pacific Regional and posted a very impressive time in July at Pioneer Square in Seattle. And Alameda County (Calif.)—now consisting of Mike Melton and Harry Myers (former four-time World Champions of Travis Air Force) and Fremont team members Justin Earles, Brian Guernsey and Justin McNulty—pulled off



With a time of 4:50, Alameda County (Calif.) won the team finals. From left to right: Harry Myers, Justin McNulty, Brian Guernsey, Justin Earles and Mike Melton.

PHOTOS COURTESY MARK G.S.T. ARLINGTON (TEXAS) FIRE DEPARTMENT