You're a *what*?



by Olivia Crosby Tightening a bolt might seem simple, but what if that bolt is 1,000 feet underwater? For commercial divers, the ocean floor is an everyday workspace. Despite the exotic location, the jobs they do can be surprisingly familiar.

"Usually we're construction workers," says commercial diver Ron Null. "The tasks we do are routine. But it's not a routine environment." And that means that even a simple task becomes more complicated.

Commercial divers build, repair, and inspect structures that are submerged in liquid. These divers might weld underwater cracks in deep-sea oil rigs, lay the foundation for a bridge piling, inspect pipes in water treatment plants, or rig and remove a 300,000-pound concrete remnant from the bottom of a river.

Because their work is so varied, commercial divers must be able to adapt. "You need to be as flexible as possible," says Ron. "Some days we are making very sensitive measurements, some days we're repairing a septic tank, and some days we're just digging a ditch."

But whatever they're doing, divers are usually working wet—in dive suits designed for the type of liquid they're in and the pressure they're under.

Divers often work in teams, with some divers in the water and others helping from the shore or on a boat. Each day begins with a briefing describing safety issues and who will do each underwater task and in what order.

Then the divers suit up, put on their helmets or masks, and jump or slide into the water.

Many jobs involve working with engineers to inspect bridges and other structures. "We are the eyes, ears, and hands for engineers," says Ron. "We inspect for them, measure, and note what

we see." Often, divers carry video cameras so that engineers can watch them as they work.

Divers say that working underwater can be a strange experience. The equipment is bulky. Movement is limited. And conditions are often cold and dark. Because it's dark, the work is tactile: Workers know where things are by feeling for them. "On the bottom of the ocean floor, you might be surrounded by concrete forms and tools," says Ron. "But over time, you come to know just where the right wrench is."

While underwater, a diver is in continual communication with helpers and other divers on the surface. These workers watch airhoses, clock time underwater, maintain logs, and give the diver instructions and assistance. When the diver finishes in the water, he or she usually dries off, warms up, puts away equipment, and then goes to the boat deck to help the next diver.

Efficiency is important because divers can spend only a specific amount of

For Ron Null, working around fish is just another day at the office.

time submerged, depending on the water depth and the equipment they are using. Every minute submerged is expensive because of the logistics involved. The best divers are clear thinkers who work quickly and improvise to solve problems.

Divers need to adjust gradually to normal atmospheric pressure after a deep dive. This process is called decompression. If the dive is very deep, divers spend hours in a decompression chamber that gradually reduces the pressure around them.

Unless these and other safety procedures are followed, divers can suffer from decompression sickness or other illnesses. In some cases, divers must protect themselves from hazardous liquids and heavy equipment.

Most divers are never seriously injured, though, in part because of their training. "If you don't pay attention, you can get yourself into a dangerous situation," says Ron. "But the job is not inherently dangerous."

But the absence of danger does not mean that the work is always pleasant. Unlike scuba divers, who swim through beautiful scenery, commercial divers work in debris. And the many divers who work on offshore oil rigs must live aboard ships for months. This time spent away from family is the biggest drawback for most divers.

Many divers start out working on oil rigs because opportunities are plentiful, the pay is good, and the job provides a chance to travel the world. Divers who want more time at home can work inland on dams, bridges, ports, and shipyards.

The difficulties divers face are reflected in their pay. Divers usually earn more than most other construction, installation, and repair workers, and the potential for very high wages is often greater. According to the U.S. Bureau of Labor Statistics, commercial divers who worked as employees earned a median of \$19.03 an hour in May 2006, meaning that half of divers earned more than that amount and half earned less. Ten percent of divers earned more than \$36.43, and 10 percent earned less than \$12.79.

Just as in other construction careers, though, pay can be sporadic. "You can work for 9 months

straight but then be unemployed for 3," says Ron. "I tell young divers that they should plan and save for a rainy day."

Despite the financial uncertainty, some divers see a variable schedule as freedom. Most people are attracted to diving by a sense of adventure, as well as by the promise of a well-paying career. "I've seen places all over the world that I never would have seen if I hadn't been a diver," says Ron. "You can work in Singapore, in Italy, be up in the mountains, or on an island—really, anywhere."

Like most divers, Ron worked as a divers' helper—or tender—for about 3 years before getting into the water professionally. Now he works as a supervisor and consultant. He plans dives and helps engineers figure out how to use diving to solve problems. But he still dives, too.

Anyone can be a diver, Ron says, even if he or she can't swim well. The most important skill for a diver is to be able to do mechanical work. "Lots of farm kids who learned how to fix their parents' tractors make very good divers," he says, "even if they never saw the water." Knowing a trade, such as welding or ironwork, is also helpful.

Nearly all divers go to diving school. Schooling usually lasts a few months and varies in quality. Those schools accredited by the Association of Commercial Diving Educators are often the most comprehensive. Employers suggest looking for schools that offer hands-on experience, low tuition, and job placement assistance.

Beyond this training, teamwork is what Ron looks for in new hires. And camaraderie is something he likes best about his work. "There's always a common goal of achievement," he says. He gains satisfaction from working together with other divers to see something built.

Conditions are sometimes rough, but after 30 years, Ron still loves the work. "During a job, I might be standing on deck in the rain and the wind, after long hours, and thinking, 'I'll never do this work again,'" he says. "But a few months later, I'm laughing with the guys who were with me, and I want to get back out there."

Olivia Crosby is managing editor of the OOQ, (202) 691–5716.