

# When Seconds Count...

**Wylie Fire Rescue is lone Texas department using cutting-edge water rescue gear**

by Judy Truesdell

**W**ylie Fire Rescue has added another weapon to its search and rescue arsenal: the Rapid Diver program, a state-of-the-art scuba system designed to dramatically reduce the amount of time it takes to get first responders into the water to save lives.

Capt. Casey Nash, who heads up WFR's Rescue Dive program, said Wylie is currently the only team in Texas utilizing the new system. "Most agencies use traditional dive gear, which is almost identical to recreational gear," he said. "The problem with this equipment is the time it takes to get dressed and in the water. Obviously, in any water emergency, time is extremely important. To have any chance of a successful rescue, you must be able to get to the scene and in the water extremely quickly."

This is where the Rapid Diver system comes in. Rather than putting on a traditional BCD, or buoyancy control device, with a 60-pound bottle attached to the diver's back, the Rapid Diver setup can be put on over the rescuer's clothing in about 15 seconds immediately upon receiving the call. It has an attached air cylinder that is much smaller than a traditional bottle and located in front of the rescuer, near his or her stomach. "This is beneficial because the rescuer can ride safely to the scene of the emergency in our fire apparatus while buckled in," Nash said.

## Time saving, life saving

How much time does the Rapid Diver program save?

"Consider the following scenario," said Nash. "We put our entire 15-member dive team through timed training two years ago using traditional dive gear. We put a simulated victim in the water in order to create a shore-based swim area emergency. The victim was 30 feet from the shore in a swim area and not visible from the shore, so search techniques were necessary.

"The rescue divers arrived in the fire apparatus along with the rest of the crew. The time began when the rescue divers' feet hit the ground and stopped when they were submerged in the water. Keep in mind, they had to get dressed with the help of a partner while on scene. They had to then lug their heavy equipment a good distance to the water, put on their fins and enter the water."

The average time it took for the rescuers to perform



**RAPID DIVER**

**SCUBA DIVER**

### POUNDS OF EQUIPMENT

30 LBS      72 LBS

### TIME TO SUIT UP

15 SEC      4 MIN

### MINUTES OF AIR

20      38

### EQUIPMENT

NO WET SUIT      WET SUIT

this task was just over nine minutes; obviously, Nash said, not acceptable in a rescue attempt.

The results were markedly better when the same test was performed with the Rapid Diver system. "This time, the rescuers arrived on scene ready to get in the water. The timer once again started when the diver stepped out of the apparatus. During this training, the average time of a diver leaving the vehicle and actually recovering the victim was just over six minutes. The record time throughout the training was four minutes and 15 seconds, set by Firefighter/Paramedic E.J. Owens. This is currently our best time."

*continued~*

The rescue team practices this drill several times a year with the goal of consistently shaving precious seconds off of that time. "Our goal is for every one of our divers to break that record this summer," Nash said.

The Rapid Diver system can also be stored in a small space and is ideal any time conventional scuba gear would be too cumbersome and restrictive. Weighing in at only 25 pounds, it's also much more comfortable for the diver.

WFR currently has four Rapid Diver sets; one is on each Quint, and the additional set is on the rescue vehicle housed at Fire Station 3. The dive team has 15 members, spread throughout the city over three shifts. "Our goal is to provide coverage throughout our jurisdiction 24/7," Nash said.

Wylie and surrounding areas experienced a great amount of rain last year, and several water-related emergencies occurred locally and throughout the state. "Some of the emergency calls that we try to prepare for include citizens driving into bodies of water, boating incidents, and swim area incidents," Nash said. "With this equipment, our divers are expected to rapidly put on the dive gear over whatever clothes they happen to be wearing, step into the fire apparatus and buckle up. While heading to the scene, the second firefighter, or dive tender in this case, assists the firefighter with donning his or her mask and connecting a communication rope that is used for tending purposes as well as hard-line communications.

"Upon arriving at the scene, the driver and the officer will obtain victim information. The diver and the dive tender quickly make their way to the shore line to attempt a rescue. The tender is then set up with a headset which he uses to speak with the diver. This is extremely helpful for accuracy of search patterns and overall safety. Our diver gets about 20 minutes of underwater time using one Rapid Diver bottle."

This type of communication is crucial in bodies of water such as Lake Lavon in which the water is so black divers can only see a few inches in front of their masks.

### **Part of the Mission**

Wylie Fire's mission statement includes a promise that firefighters will dedicate themselves to "providing a progressive department in order to save lives."

"This is not only true when it comes to dive emergencies," Nash said. "We constantly monitor the area we serve for hazards and potential threats. We then look for the best way to handle this potential hazard. We are not simply satisfied with current equipment or a 'traditional' way of handling things. We want our citizens to have the absolute best chance at surviving a dangerous incident. We always have our eyes open for cutting-edge equipment as well as techniques. The Rapid Diver system is simply our attempt at living out our mission statement." •



## ***The Escaping Wheelchair Adventure***

Garland resident Ina Freeman, age 92, was enjoying a day at Lake Lavon with her three adult children: Theresa Freeman Collins and Rochelle Martino, also of Garland, and son Thaddeus Freeman of Largo, Fla. The family had camped there the night before.

On the East Fork ramp, the siblings were helping Mrs. Freeman from her wheelchair to a float in waist-deep water. "I turned back to get the chair," said Thaddeus, "only to discover, to my dismay, it was gone. It had slipped into the murky waters of the lake."

Collins said it was quite a moment when they realized it was gone. "The boat ramp was closed, so we had parked quite far away and rolled her down the ramp," she said. "We started to wonder how we would get her back up to the car!"

While the three searched the water, trying to locate the chair by feel and by feet, Wylie Fire Rescue Capt. Brandon Gibson and Firefighters Travis Araujo, Jared Buckmeier and Jimmy Johnston arrived at the lake. "Boat 143, the rigid inflatable boat, had been having some intermittent problems that we had been trying to replicate and narrow down in order to repair," said Ritter.

Mr. Freeman spotted the WFR crew and decided to swallow his pride and ask for help. Ritter said the guys were glad to be of assistance. "These guys are members of the Special Operations Team, and they love a challenge."

Using the Rapid Diver setup, they performed a basic search pattern and were able to locate the wheelchair – 40 feet from where it had entered the water. The guys admitted they were all "very surprised at how far that wheelchair had traveled down the ramp ... under water," Ritter said.

Collins said the whole adventure took about 45 minutes, with the firefighters taking only 15 once they got in the water. "You don't know how good we felt when they handed us back that chair!" she said.

"Thank you, Wylie Fire Rescue! You guys are awesome!" said Mrs. Freeman. •