

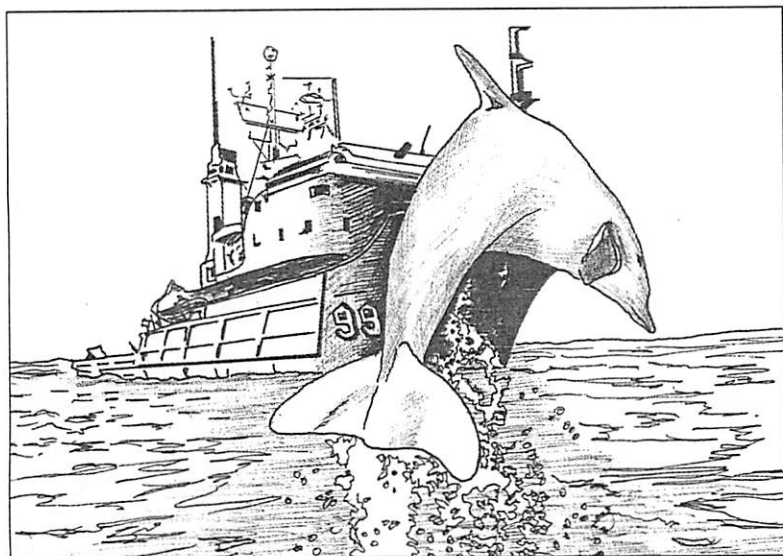
## 2-E: READING SELECTION

**Directions:** Read the story, "Navy Dolphins," and answer the questions that follow.

### Introduction

*Everyone knows about dolphins from TV and from watching them in water park shows. However, few people know that the Navy has also used dolphins for over forty years. This passage tells about their military use.*

## Navy Dolphins



Dolphins are intelligent sea mammals. Over the years, many have been trained to do various tasks. These include finding things underwater and jumping through hoops held high above the water.

In the 1960s, the United States Navy began to experiment with dolphins. The program was top secret and few people knew about it until the late 1980s. At that time, newspapers had several articles about dolphins being used to find underwater mines during the war with Iraq.

The Navy had two goals when it started working with dolphins in 1960. One was to learn why dolphins were able to swim so fast and dive so deep. The Navy thought this information would help them design ships that moved faster in the water.

The second goal was to study how dolphins found things underwater. Dolphins possess the most sophisticated sonar known to man. The system is called "echolocation" and allows dolphins to find things underneath three feet of mud or in water so murky that humans cannot see more than a few inches. The Navy wanted to train dolphins to find things like mines and missiles without causing them to explode.

The "mine-sniffing" dolphins were taught to avoid touching the mines because, if touched hard enough, the mines would explode. Once a mine was found, the dolphins would drop a weighted buoy line near the mine and Navy divers would then disarm it.

Dolphins have also been trained to guard ships. They were trained to swim slowly around ships looking for swimmers and divers and, if they spotted these uninvited guests, the dolphins would knock on a ball suspended from a patrol boat. This would tell their handler that an enemy swimmer was in the area. Dolphins were taught never to attack a human swimmer. One dolphin was taught to carry mail and tools to an underwater lab. This dolphin repeatedly

swam the two hundred feet between the surface and the lab without once losing anything it carried. Furthermore, this dolphin was trained to guide lost divers to safety.

Navy dolphins were employed to help guard the Republican Convention in 1996. These dolphins swam in San Diego Bay and helped provide security to the convention center located on the bay.

Dolphins have been used in war zones four times, too. The first was during the Vietnam War in 1970 where they were used to detect enemy divers near ships. The second time was in 1987–1988 during the Iran–Iraq War when they were used to escort oil tankers through dangerous waters. Dolphins were used in both the first and the second Gulf Wars to find mines in harbors. No dolphin was lost due to enemy action in any of the four war zones.

The Russian Navy also trained dolphins. They started using dolphins in 1966 to provide security around their ships in the Black Sea. Russia also trained dolphins to find missiles and torpedoes that were fired during tests.

Today, the use of dolphins by both navies has declined. At its height, the U.S. Navy had well over one hundred dolphins; however, today, there are less than seventy and the program continues to shrink.

The number of dolphins in the Russian Navy has been greatly reduced as well. Some have been used in scientific research with sick children. Children who stammer or who have cerebral palsy or autism improved faster when their therapy involved dolphins. The children were allowed to swim with the dolphins if they completed their therapy. The improvement in children who received the same therapy without swimming with dolphins was much less.

Today, the U.S. Navy still uses dolphins. They are being trained to find mines in shallow water. Humans have difficulty finding mines in water ten to forty feet deep. The amount of noise in shallow water is much greater than in deeper water. Mechanical sonar does not work well in these areas. Dolphins can find mines and other objects much better.