PUBLIC STATEMENT REGARDING THE NOAA DIVING PROGRAM'S DECISION TO LIMIT THE USE OF SPLIT-FINS

The investigation following the death of two US Coast Guard divers on 17 August 2000 listed a number of findings. One of the findings indicated that "Both divers wore split fins designed for high speed, but which provide minimal thrust in heavy diving. Split fins are not considered appropriate for heavy diving, but rather for light diving and snorkeling."

The NOAA Diving Safety Board discussed the finding and decided to prohibit the use of split fins for diving when heavy exertion may be required and/or when wearing a drysuit. There use is still authorized for light diving and snorkeling.

Following the decision, the NOAA Diving Center conducted a series of tests in Lake Washington to determine the viability of using split fins with drysuits. Three tests were performed:
1) swimming a given distance underwater
2) lifting a negatively buoyant diver to the surface with fins only and
3) towing a tired diver at the surface.
Both divers wore dry suits, DUI harnesses with typical weighting for freshwater (about 5 lbs negative at surface), and single AL 80 cylinders. The lake was calm with no current or surface waves.

Swimming underwater: The divers swam a distance of 200 feet at a depth of approximately 15-feet. It took the test diver 73 kick cycles with the split fins versus 48 with the turtle fins.

Lifting object: Each diver attempted to lift the other diver to the surface from a depth of 30-feet without the aid of buoyancy. The combined negative buoyancy of both divers was approximately 15 pounds. One of the divers was unable to leave the bottom using split fins and was able to ascend to approximately 10-feet with turtle funs. The other diver was able to ascent approximately 5-feet off the bottom using split fins versus all the way to the surface using turtle fins.

Towing on the surface: One of the divers towed the other approximately 200-feet on the surface using the tank valve tow method. It took 2:53 with split fins and 2:13 with turtle fins.

It was also the consensus of both divers that:

1) the split fins were not as efficient for sculling as turtle fins,

2) several kicks were required with split fins before a diver begins to move forward in the water negating rapid movement in an emergency, and

3) changing direction while swimming with split fins required more time and kicking

These tests further substantiated the safety board's decision to prohibit the use of split fins for diving when heavy exertion may be required and/or when wearing a drysuit.