

Boating and Water-Skiing Accidents*

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By

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Analysis of motor boating and water-skiing losses offer some unique challenges. Like automobile collision analyses, damage patterns on motorboats resulting from a collision can be photographed and analyzed. However, unlike automobile collision analysis where skid marks, photographs and police department accident scene measurements are available, the location of impact of two motorboats on a waterway may be difficult to establish. Wind, wave action, current and tidal motion can move watercraft from the point of impact. In many instances the boats are driven or towed immediately to the nearest shore to reduce the chance of loss by sinking, and to recover the injured on board. The following is a discussion of points to consider when analyzing motor boating and water-skiing accidents.



Figure 1

Figure 1 is a photograph of an outboard motorboat that was struck broadside by another boat. Photographs of side and front views of each hull plus close-up photographs of damage patterns are desirable. Look for missing parts such as cleats, anchors and other heavy objects. It is possible that these items may be at the bottom of the waterway where the accident occurred. Visiting and photographing the scene is very helpful. It may be pos-

sible to recover parts of the hulls and help establish point of impact.

The shape of the waterway may have contributed to the accident such as a sharp bend or an obstruction such as a bridge. Check to see if appropriate navigation warnings or directives are visible at the accident scene. A no wake sign at the accident scene may have been ignored by a speeding boat operator. Witness statements can be helpful in reconstructing the events leading up to the accident. Obtaining a geological survey map can lend accuracy to the locating of various artifacts involved in the accident. For single boat accidents, where a member of a party associated with one boat, such as a water-skiier is injured, an immediate inspection of the equipment involved is essential. Figure 2 is a radiograph (X-ray) of the fractured femur of a lady water-skiier. Figure 3 shows



Figure 2

the water-ski she was using at the time of the accident. Markings on the water-ski or tow rope handle may help in determining the



Figure 3

cause of the accident. In this particular case no deficiencies were found in the tow rope and water-ski that could have caused the accident. It appears that a complex interaction of the water-skier with the wake of another boat was a primary cause of a fall that caused the fracture.

For boating accidents resulting in property damage only, an immediate inspection is also necessary. Figure 4 is a view of an in-board motorboat that traveled through a large wake, resulting in water ingestion into the engine. Cracks were found in the engine block and were claimed to be caused by hydrostatic lock-up from the water ingestion. Metallurgical analysis of the cracks indicated a fatigue failure associated with long term engine operation and not the single event of water ingestion. If the engine block



Figure 4

had not been recovered and preserved, the fatigue failure would not have been identified. Immediate action in investigating boating or water-skiing accidents can save valuable evidence that may otherwise be lost. During rescue operations, water-skis, tow ropes and other equipment can float away, never to be recovered. The importance of preservation of equipment involved cannot be over estimated.

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