

History



About 1987-1990 Mercury Marine and Outboard Marine Corporation (OMC) were under tremendous pressure from a rapidly growing number of propeller guard lawsuits, propeller safety advocates, legal firms, the media, the public, boaters, and even their own employees to defend why they were not using propeller guards.

The industry desperately needed an independent study backing their decision not to use propeller guards.

The Story Begins

Resolution 18 was passed at NASBLA's 1987 meeting.

Resolution 18 : *Protective Guards for Propellers. Requests the Coast Guard investigate through an independent laboratory to see if development of propeller guards are an effective device to prevent or reduce injuries and fatalities involving contact with propellers.*

USCG responded to NASBLA in a March 29, 1987 letter in which they recounted a March 18, 1987 report (USCG's Purcell & Lincoln report) with inconclusive findings on the use of propeller guards.

The report noted, "Several lawsuits involving tens of millions of dollars have been brought to court in the past two years and have heightened interest in this subject substantially."

The Coast Guard told NASBLA Purcell & Lincoln's study was **inconclusive**. As a result, this does not appear to be the best place to spend USCG research and program dollars.

USCG's Purcell & Lincoln study were a couple guys in a room with much of the existing research and data. Yet there was not enough data and research for Purcell & Lincoln to reach an informed opinion. Thus their results were inconclusive.

Purcell & Lincoln said they could not even conduct a study due to the lack of accurate accident data, lack of biomechanical studies from which to develop biomechanical tests, and lack of mechanical studies encouraging development and submission of candidate devices (propeller guards).

Yet, NBSAC put a few people in a room, including two boating industry representatives, with much of the same information plus some additional submissions one year later. This time, NBSAC determined the Coast Guard should take no regulatory action to require the use of propeller guards.

Organizations & Entities



National Association of State Boating Law Administrators

USCG Office of Boating Safety

National Boating Safety Advisory Council (NBSAC)

NBSAC Propeller Guard subcommittee

Propeller Accident Statistics

Unreported Accidents

In the past USCG has estimated only 5 to 10 percent of all boating accidents are reported. USCG and the boating industry claim almost all boating fatalities are reported AND that serious accidents are more likely to be reported than minor accidents.

Unreported propeller accidents are still a major problem, and were an even worse problem in the late 1980s. Almost every propeller injury / propeller guard study since 1978 has pined over the lack of accurate propeller strike statistics, and encouraged USCG to reduce the number of unreported accidents.

Categorizing Propeller Accidents

Originally boat propeller accidents were included in the "struck by boat or propeller" category. In 1996 they were placed in the "struck by motor/propeller" category. In 2008 USCG began reporting them in the "struck by propeller" category. The boating industry still claims some "struck by propeller" accidents were really struck by the boat and/or struck by the motor.

BARD

USCG records boating accidents in their annual Boating Accident Report Database (BARD). Accidents are reported as a series of up to three events, such as:

- Event 1 - Struck submerged object
- Event 2- Fell overboard
- Event 3 - Struck by propeller

Recreational Boating Statistics Report

Every year, USCG summarizes BARD accident data in their annual Recreational Boating Statistics report.

USCG's annual Recreational Boating Statistics publication features Event 1 data which only represents a small percentage of all propeller strikes as seen below.

The 1987 annual Boating Statistics Report only reported fatalities. It reported **12 "struck by boat or propeller" fatalities**. This was **only Event 1 data**.

Actual BARD data for 1987 was 41 "struck by boat or propeller" fatalities and 163 injuries for a total of over 200 injuries and fatalities. Two USCG studies focused on Event 1 data and showed struck by propeller fatalities are rare.

The boating industry always wants to focus on fatality data. They say the fatality data is more complete than injury data. One of the boating industry's techniques is to minimize the number of accidents being discussed at once in order to reduce the apparent severity of the problem and any sense of urgency to fix it.

By 1989 the annual report began to include injuries as seen below. However, it still only supplied Event 1 data.

1989	TOTAL	FATALITIES	INJURIES
TYPE OF ACCIDENT			
Grounding	385	13	243
Capsizing	576	330	258
Swamping/Flooding	228	70	77
Sinking	219	31	54
Fire or Explosion of Fuel	303	7	179
Other Fire or Explosion	60	6	11
Collision with Another Vessel	2,039	60	1,265
Collision with Fixed Object	797	60	509
Collision with Floating Object	296	8	116
Falls Overboard	428	217	252
Falls within Boat	119	0	142
Struck by Boat or Propeller	65	6	60
Other Casualty; Unknown	548	88	469

For decades the boating industry cited Event 1 data as representing the total number of boat propeller accidents.

Total injury and fatality counts for all three events can be determined using the BARD database, however BARD has a pretty steep learning curve, especially prior to 1995.

Quote from the USCG Purcell & Lincoln report

"the difference between occurrence of either a fatality or an injury in a given accident is often a matter of chance. Therefore the entire range of accident causes and preventative measures must be considered." Thus injuries, fatalities, and even near misses need to be considered.