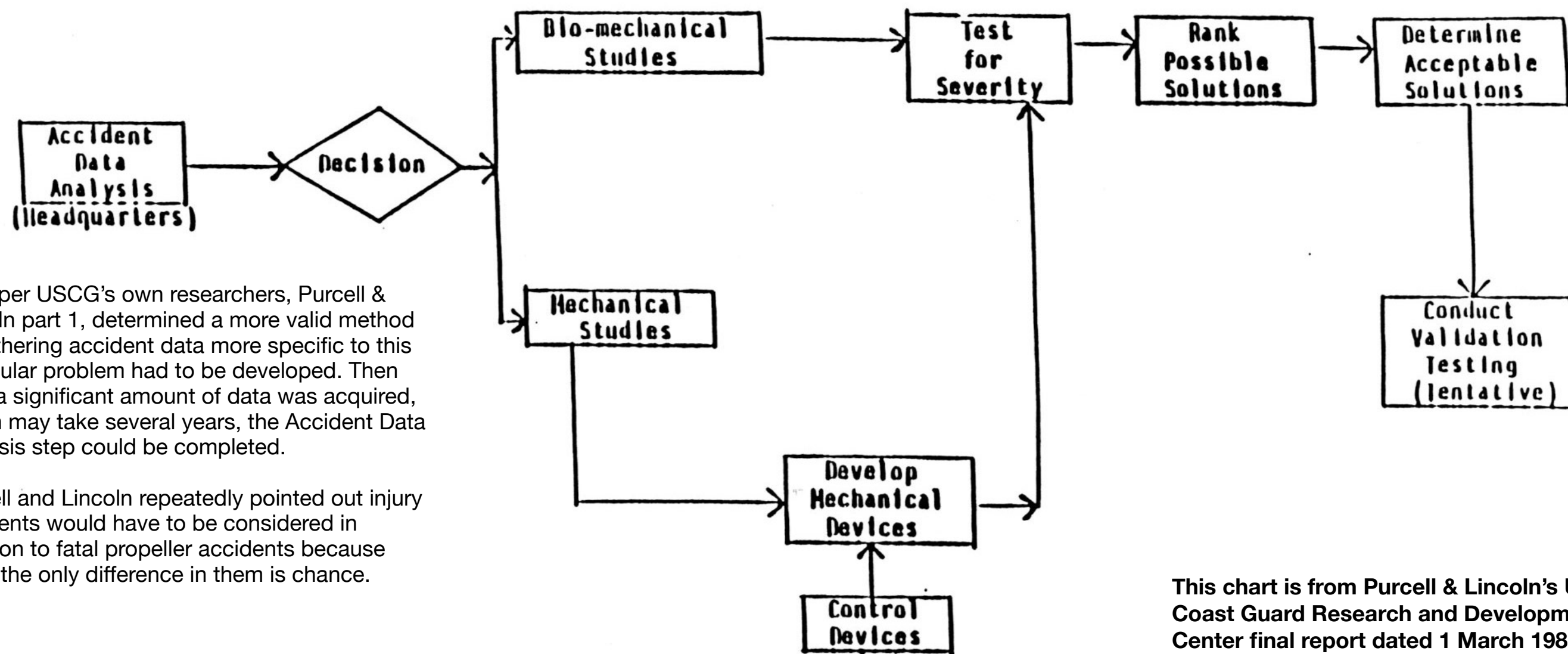


2. USCG Propeller Guard Report by Purcell & Lincoln

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Purcell & Lincoln part 2



Note per USCG's own researchers, Purcell & Lincoln part 1, determined a more valid method of gathering accident data more specific to this particular problem had to be developed. Then after a significant amount of data was acquired, which may take several years, the Accident Data Analysis step could be completed.

Purcell and Lincoln repeatedly pointed out injury accidents would have to be considered in addition to fatal propeller accidents because often the only difference in them is chance.

This chart is from Purcell & Lincoln's U.S. Coast Guard Research and Development Center final report dated 1 March 1987

USCG's Purcell & Lincoln Flow Chart for how the process of evaluating the usefulness of propeller guards should go forward

What Happened Next

One year later, in May 1988, the U.S. Coast Guard National Boating Safety Advisory Council (NBSAC) formed a Propeller Guard Subcommittee composed of 4 to 7 men to review documents reviewed earlier by Purcell & Lincoln plus presentations and additional documents submitted by interested parties.

NBSAC's propeller guard subcommittee was given specific charges including:

1. "Review available data on prevention of propeller-strike accidents and the Coast Guard study of various methods of shrouding propellers to prevent contact with a person in the water."
2. "Assess the arguments for and against some form of mechanical guard to protect against propeller strikes."

Over the next year and a half the subcommittee reviewed specific documents, held meetings, invited speakers, and presented their report on November 7, 1989.

No accident statistics were mentioned in the body of the NBSAC report. Minimal fatality data was provided in one of the appendices.

The Coast Guard itself reviewed much of the same information in 1987 that the NBSAC subcommittee did in 1988-1989. USCG researchers Purcell and Lincoln said they were unable to evaluate the utility of propeller guards because:

1. It could take years to gather accident data needed to make a decision on propeller guards.
2. Injury data and fatality data would both have to be considered. "The difference between occurrence of either a fatality or an injury in a given accident is often a matter of chance."
3. Biomechanical studies would have to be completed before a decision could be made.
4. Mechanical studies would have to be completed and the public sector would need to be encouraged to develop propeller guards to be tested.
5. Test for injury severity would then have to be conducted.
6. Potential solutions would need to be ranked.
7. Acceptable Solutions would need to be identified.
8. Validation testing would need to be performed.

However, NBSAC's propeller guard subcommittee which included representatives from two of the largest outboard motor manufacturers in the world (OMC and Mercury Marine) that were currently facing large numbers of propeller guard lawsuits, performed none of the 8 steps above before announcing their recommendation:

"The U.S. Coast Guard should take no regulatory action to require propeller guards."