

NASBLA Engineering, Reporting & Analysis Committee Accident Reporting & Analysis Subcommittee

Boating Accident Analysis Status Report

Charge 1:

Analyze boating accident and other related available data to begin separating out human (operator-controllable) and boat-related factors from potential external influences, factors or predictors that may significantly contribute to and affect boating accidents and accident trends. Consider potential contributors such as economic conditions, climatic patterns, and other external trends. Develop an issue brief on findings.

For the 2008 Committee cycle, the Accident Reporting & Analysis Subcommittee was given a new – and as it has turned out – longer-term research charge to analyze boating accident and other related data with an eye toward separating out human- and boat-related factors from other external factors. The intent is to explore the available data in ways that acknowledge, but attempt to reach beyond anecdotal descriptions of how these external factors might be contributing to accidents and affecting the boating community's understanding of the trends associated with those accidents. This charge represents a significant redirection in focus from that of the predecessor to the Subcommittee – the former Boating Accident Investigation Reporting & Analysis Committee. And, it will be carried over into the 2009 Committee cycle.

In preliminary work leading to the March 14, 2008 session of the Subcommittee – and in an attempt to shape a research focus for this very broad charge – members were asked to examine their respective jurisdictions' data to try to discern possible patterns in types of boating accidents. The expectation was that the group could hone in on a couple of areas of specific concern before requesting national data from the USCG. Two areas were identified – drownings and nighttime speed limits.

However, as a result of the in-person time spent brainstorming about the types of accidents that lead to fatalities, let alone possible contributing factors, the Subcommittee decided to let the data help define the approach the project (or projects resulting from this single charge) would take. One outcome of the discussions was the development of a data query tree to guide an initial drilling into BARD data with the assistance of USCG personnel.

The initial data request to the USCG was based on the Subcommittee's reading of the 2006 drowning deaths (or what was termed "drowning deaths -- involuntarily leaving the vessel, DDILV). Those were identified as capsizing, falls overboard, flooding/swamping, sinking, and ejected.

The data were requested in the following categories for initial exploration:

DDILV by boat length – Under 18', Over 18'
DDILV by type of boat – Open motorboat, canoe, kayak, inflatable
DDILV by water temperature – Under 50, 50-70, Over 70
DDILV by age – Highest 20 year range
DDILV by contributing factor – Top 3
DDILV by operation of vessel at time of accident – Top 3
DDILV by activity at time of accident – Top 3
DDILV by operator experience – Under 50 hours, Over 50 hours
DDILV by speed – Under 10 mph, 10-20 mph, Over 20 mph
DDILV by - Alcohol involved
DDILV by – Number of persons on board

Next Steps: Following the March meeting, USCG personnel pulled the BARD records from 2002-2006, current as of March 17, 2008. The data were provided in Access database files for querying on the aforementioned fields identified by the Subcommittee during their meeting.

However, in an early May conference call, participating Subcommittee members noted the difficulties of working with such files, and above all, of discussing the data and attempting subsequent analyses long distance, via conference call. As a result, steps were taken to facilitate the continuing discussions – whether in person or long distance. Subcommittee members will receive initial "findings" or observations from these queries to "react to," rather than being expected to sort through the data themselves.

Subsequent to the call, the task leader for this portion of the charge was able to enlist IT personnel in his division to generate those queries and pull the data for the DDILV categories above. As of July, a task group consisting of the task leader, another member of the Subcommittee, and Committee staff is in the process of reviewing the initial tables and reports. This work is expected to continue in the weeks leading to the annual conference. The intent is to produce those initial observations/findings in a report back to the Subcommittee and for presentation at the conference. Other steps will need to be taken to get around the significant difficulties of tackling this work in the Subcommittee/Committee framework, within the timelines/cycle prescribed for all Committees, and in the (current) absence of multiple in person sessions. However, this will be done with an eye toward ensuring that any such accommodations do not diminish the integrity of any analyses and that the current exploratory work leads to a "doable" and meaningful set of research tasks that can build upon each other.