

March 11, 2002

VIA FACSIMILE

Docket Management Facility
U.S. Department of Transportation
400 Seventh Street, SW
Washington, DC 20590-0001
Facsimile: (202) 493-2251

Re: Federal Requirements for Propeller Injury Avoidance Measures

Dear Sir/Madam:

Congress established the Office of Advocacy of the U.S. Small Business Administration (Advocacy) under Pub. L. No. 94-305 to represent the views of small business before Federal agencies and Congress. Advocacy is also required by section 612 of the Regulatory Flexibility Act (RFA) (5 U.S.C. § 601-612) to monitor agency compliance with the RFA. In 1996, Congress enacted the Small Business Regulatory Enforcement Fairness Act which made a number of significant changes to the Regulatory Flexibility Act, the most significant of which was the addition of a judicial review provision that permits small businesses to sue agencies that fail to comply with the RFA.

On December 10, 2001, the United States Coast Guard published a Notice of Proposed Rulemaking (NPRM) in the *Federal Register*, Vol. 66, No., p. 63645 on *Federal Requirements for Propeller Injury Avoidance Measures*. The purpose of the proposal is to require owners of non-planing recreational houseboats with propeller-driven propulsion located aft of the transom to install one of two propulsion unit measures or employ three combined measures. The Coast Guard asserts that the proposal will reduce the number of boaters that are seriously or fatally injured when struck by a non-planing recreational houseboat with propeller-driven propulsion.

In the proposal, the Coast Guard certifies that the proposal will not have a significant economic impact on a substantial number of small entities pursuant to section 605 of the RFA. The Office of Advocacy asserts that the proposal fails to comply with the requirements of the RFA and the Administrative Procedure Act (APA) and recommends withdrawal of the proposal for further analysis.

The Coast Guard's Failure to Comply with the Requirements of the APA

The Administrative Procedure Act (APA) sets forth the requirements that an agency must follow in promulgating a proposed rulemaking. In reviewing an agency action, a court may hold an agency action unlawful and set it aside if the findings, and conclusions are "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law." See, 5 USC§ 706 (2). Advocacy asserts that the proposal, as published, would not withstand an APA challenge.

The Coast Guard's Actions May Be Considered Arbitrary, Capricious, an Abuse of Discretion, or Otherwise Not in Accordance with the Law

Under an arbitrary and capricious standard, an agency's action is considered arbitrary and capricious if the agency fails to consider an important aspect of the problem, or offers an explanation that runs counter to the evidence before agency, or offers an explanation that is so implausible that it could not be ascribed to a difference in view or a product of agency expertise. Mobile Communications Corporation of America v. FCC, 77 F.3d 1399 (D.C. Cir. 1996). The agency must articulate a satisfactory explanation for its action including a "rational connection between the facts found and the choice made." Missouri Public Service Commission v. FERC, 215 F.3d 1 (DC Cir. 2000); Northern Municipal distributors Group v. FERC, 165 F.3d 935 (DC Cir. 1999).

There Is No Rational Connection between the Facts Found and the Choice Made

The Coast Guard asserts that the proposal is a necessary safety measure that it is allowed to institute pursuant to 46 U.S.C. § 4302, which states that the Secretary may prescribe regulations "establishing minimum safety standards for recreational vessels and associated

equipment...” Advocacy asserts that the proposed action goes beyond the Coast Guard’s statutory mandate to establish the minimum safety standards. If anything, it appears that Coast Guard is selecting the maximum safety standard without sufficient evidence to demonstrate a) the need for the particular choice, or b) that the particular choice will address the problem.

The Coast Guard chose propeller cages or emergency shutdown switches and video cameras/monitors, not education or simple warning signs. The agency asserted that these measures are necessary because houseboat propellers accidents are a “chronic” problem, and because many members of the public have been demanding action. However, the agency’s decisions should ultimately be driven by an analysis of the facts. A review of the Coast Guard’s Boating Accident Reporting Database revealed that from 1991-2000, the number of accidents from houseboat propeller accidents is miniscule¹ and have in fact been declining. For *all* houseboats, from 1991-1995, an average of three accidents (per year) was reported, whereas from 1996-2000, the average was one. For *rental* houseboats, from 1991-1995, the average was two and from 1996-2000, the average was approximately zero. Since 1996, there has been just one injury and no fatalities among rental houseboats.² For additional information, see the appendix.

“Chronic” indicates constant recurrences when in fact the evidence shows that the recurrences are constantly declining. Constantly declining occurrences in no way support a finding that this is a chronic problem that requires agency intervention. In that there is not rational basis for the proposal, the agency’s action could be considered arbitrary and capricious.

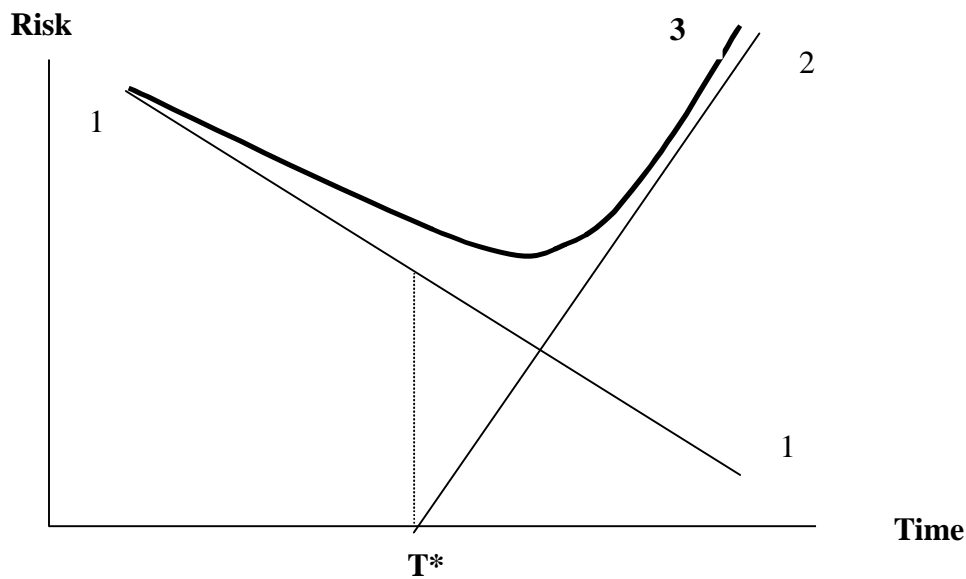
There is also a reasonable chance that the proposal could actually increase overall safety risks. The costs of complying with the rule may reduce the amount of resources people have to spend on other risk-reduction activities, such as health care and houseboat safety. When people have fewer resources, they have less to spend on other risks. The resulting increase in

¹ For example, in 2000, there was just one houseboat propeller accident but nearly 8,000 boating accidents reported. Compare Snyder, Richard H. Letter to the Coast Guard on Federal Requirements for Propeller Injury Avoidance Measures, February 26, 2002 with the US Coast Guard. 2000. Boating Statistics.

² Snyder (letter).

other risks may offset the questionable decrease in risk attributable to the Coast Guard’s regulation.³ Moreover, since the risk of a propeller strike is small and the proposed measures appear to be very ineffective relative to its costs, then total risk could rise instead of fall.^{4,5}

In the chart below, line 1 depicts the risk of propeller strikes as a decreasing function of time. If the rule becomes effective at time T*, other risks can be represented by line 2. Overall risks, then, decrease before the rule and increase shortly after the rule to reflect the new component absent from the scenario before the rule was implemented.⁶



Furthermore, there is no indication in the proposal that the proposed propeller injury avoidance measures will be more successful in reducing the injuries and deaths than education or a simple warning sign. The Coast Guard proposes the following measures:

- Clear Visibility Aft Device. This device is supposed to enable the operator to see a person in the water immediately behind the boat, where the propellers are located.

Advocacy doubts that regulated entities would be able to use mirrors, instead of video

³ Wildavsky, Aaron. 1980. “Richer is Safer.” *Public Interest*, Vol. 60, pp. 23-29.

⁴ For a similar argument, see Burnett, Jason K. and Robert W. Hahn. “EPA’s Arsenic Rule: The Benefits of the Standard Do Not Justify the Costs.” AEI-Brookings Joint Center for Regulatory Studies Regulatory Analysis 01-02, January 2001, p. 8.

⁵ Radwan Saade, Ph.D., Economist, Office of Advocacy, Small Business Administration, Washington, DC.

⁶ *Id.*

cameras and monitors, to comply with this rule. Even if there were a combination of mirrors that would suffice, there does not appear to be a need for such a measure. The Coast Guard did not – not even once – identify “restricted vision” as a cause of houseboat propeller accidents in the past 10 years.⁷ Indeed, operator inexperience, negligence, and inattention accounted for many more of these accidents⁸ – problems that would not be remedied by adding mirrors. Forcing an owner to install additional mirrors would not force the operator to use them. There is no evidence of the need for this device.

- Ignition Cut-Off Switch. This device would shut the engine off whenever the operator leaves the helm. However, there would be a need for the device only if there was a significant risk that the operator will be thrown overboard. Since houseboats operate at such slow speeds and with such limited maneuverability this is not likely to occur. In any event, a switch would not influence operator behavior. A negligent, inattentive, or inexperienced operator would tend to be just as negligent, inattentive or experienced with this device in place as without it. Also, to be of benefit, the operator would have to be away from the controls during the accident but according to BARD statistics, this happened only once in the 20 accidents.⁹ There is insufficient information regarding the need for this measure.

- Swim Ladder Interlock. With this device, the engine would shut off whenever a ladder is lowered near a propeller. This device is designed to prevent the situation where someone is climbing aboard at the same time another begins to operate the houseboat. Not once did BARD statistics indicate that “passenger/skier behavior” was a cause of an accident.¹⁰ Also, Advocacy understands that at least one of the two reported deaths did not involve a ladder, but that both were due in large measure to alcohol-related, reckless behavior,¹¹ and this device would not influence this kind of behavior. It is not clear to Advocacy why the Coast Guard would decide to punish thousands of houseboat owners

⁷ Snyder.

⁸ *Id.*

⁹ *Id.*

¹⁰ *Id.*

¹¹ Snyder, Richard H. Personal communication, March 7, 2002.

for the reckless behavior of a few, rather than focus on the proximate cause of the accident – alcohol use. There is insufficient evidence of the need for this device.

- Propeller Guards. The purpose of this device is to prevent persons from coming into direct contact with a propeller by enclosing the propeller in a steel cage. If cages could be constructed to keep fingers, hands and feet out of them, the propeller strikes may be avoided, however the Coast Guard would be trading one risk for other severe risks. At speeds as low as 8 miles per hour, there is a possibility of serious if not fatal injuries if the heads of swimmers were to come into contact with a cage. There could also be significant losses in fuel economy.¹² If cages were not properly constructed, and incidentally, none are today,¹³ there would also be a risk that swimmers that come into contact with a cage could become entangled and dragged along behind the boat and drowned. Also, as asserted above, every dollar spent on a cage would be one dollar less that a houseboat owner would have to spend on other, more significant risks. The number of drowning deaths by other causes far outweigh those related to houseboat propeller strikes (“0”),¹⁴ but under this proposal, houseboat owners would each have \$300-2000 dollars less to spend on life jackets, for example, according to the Coast Guard. Fed. Reg. at 63648.

In summary, the Coast Guard has failed to provide a rational basis for the proposal. As indicated above, its own records fail to demonstrate the need for the rule. The chronic problem it supposedly addressed is practically non-existent. Moreover, even if a problem existed, the suggested solutions may not solve the problem. Accordingly, the Coast Guard has failed to make a rational connection between the facts found and the choices. Therefore, the Coast Guard has failed to comply with the APA.

Advocacy is raising this concern because most small businesses are not aware that under this proposal, they would be forced to make investments to meet the requirements of the proposed rule that may or may not be necessary. Before finalizing such a rule, the Coast Guard should

¹² *Id.*; Suttie, Mark. Letter to Coast Guard regarding Federal Requirements for Propeller Injury Avoidance, March 8, 2002.

¹³ *Id.*

¹⁴ Snyder (letter); Coast Guard. 1997-2000. Boating Statistics.

withdraw the rule, issue a new proposal if necessary and notify small businesses about the risks and provide them with an adequate opportunity to comment.

The Coast Guard's Failure to Comply with the RFA

Regulatory Flexibility Act Requirements

The RFA requires administrative agencies to consider the effect of their actions on small entities, including small businesses, small non-profit enterprises, and small local governments. See 5 U.S.C. §601, et. seq.; Northwest Mining Association v. Babbitt, 5 F. Supp. 2d 9, (D.D.C. 1998). When an agency issues a rulemaking proposal, the RFA requires the agency to "prepare and make available for public comment an initial regulatory flexibility analysis [IRFA]" which will "describe the impact of the proposed rule on small entities." 5 U.S.C. § 603(a); *Id.*

The law clearly states that an IRFA shall address the reasons that an agency is considering the action; the objectives and legal basis of the rule; the type and number of small entities to which the rule will apply; the projected reporting, record keeping, and other compliance requirements of the proposed rule; and all Federal rules that may duplicate, overlap or conflict with the proposed rule. The agency must also provide a description of any significant alternatives to the proposed rule which accomplish the stated objectives of applicable statutes and which minimize any significant economic impact of the proposed rule on small entities. 5 USC § 603(c).

Section 605 of the RFA allows an agency to certify a rule, in lieu of preparing an IRFA, if the proposed rulemaking is not expected to have a significant economic impact on a substantial number of small entities. If the head of the agency makes such a certification, the agency shall publish such a certification in the Federal Register at the time of the publication of the general notice of proposed rulemaking along with a statement providing the factual basis for the certification.

The Coast Guard's Failure to Provide a Factual Basis for Certification

As stated above, the RFA requires an agency to provide a factual basis for its determination that the proposal will not have a significant economic impact on a substantial number of small entities. The factual basis for the certification states that:

“...Individuals, not small entities, own the majority of non-planing houseboats affected by this rule; however, under the Regulatory Flexibility Act, the Coast Guard must determine the impact on small entities. The Coast Guard estimates that there are 300 houseboat rental facilities that must install the propeller injury avoidance measures required by this rule. In order to minimize the burden on these small entities, the Coast Guard would provide them 3 years (an additional year beyond the 2 years provided to owners of non-rental houseboats) to comply with this rule.

Therefore, the Coast Guard certifies under 5 U.S.C. § 605(b) that this proposed rule would not have a significant economic impact on a substantial number of small entities. If you think that your business, organization, or governmental jurisdiction qualifies as a small entity and that this rule would have a significant economic impact please submit a comment...” Fed. Reg. 63648.

Advocacy contends that the factual basis provided does not comply with the requirements of the RFA.

The Proposal Will Affect a Substantial Number of Small Entities

Advocacy asserts that the information provided by the Coast Guard indicates that this rule would affect a substantial number of small entities. The phrase “substantial number” refers to the number of small entities within the universe of entities to be regulated. As noted above, the certification states that there are 300 houseboat rental facilities in the United States. The Coast Guard further states that it has provided measures to minimize the impact on “these small

entities,” implying that all of the facilities are small. Moreover, data supports a finding that most of the members of the houseboat rental industry are small. Advocacy compiled information on small businesses based on the North American Industry Classification System (NAICS) and for NAICS 532292, which includes all recreational goods rental, 24,672 or 98% of the 25,219 firms were defined as small businesses based on SBA’s definition of small business (less than \$6 million in gross annual receipts).¹⁵

In that the rule applies to all of the houseboat rental facilities, it is clear that the number affected will be substantial. The only question remaining, therefore, is whether the factual basis supports the finding of no significant economic impact. Advocacy contends that it does not.

The Proposal Will Have a Significant Economic Impact

Although there is information in the preamble that indicates that the proposal will have a significant economic impact, the factual basis provided does not use that information to address the issue of significant economic impact. The factual basis merely states the measures it has taken to minimize the impacts and solicits information from the public concerning the economic impact. However, the Coast Guard fails to explain how these measures would minimize burden or offer any evidence to that end.

Moreover, while Advocacy applauds the effort to solicit additional data on the economic impacts of the rule, Advocacy is perplexed by the Coast Guard’s failure to use its own information to address the issue of significant economic impact. The information provided indicates that there will be a cost of \$300 for the propeller guard per boat owned by a particular facility. Since many houseboats have two propellers,¹⁶ the cost per boat would be \$600.

There are 5,000 rental boats and 300 facilities, averaging about seventeen boats per facility. With an average cost of \$600 per boat for seventeen boats, the cost per rental facility is \$10,000.

¹⁵ The Number and Percent of Firms, Establishments, Employment, Annual Payroll, and Estimate Receipts by Industry and Employment Size. United States Census Bureau, Department of Commerce, prepared under contract by the Office of Advocacy, Small Business Administration, Washington, DC, 1997.

¹⁶ Suttie, Mark. Personal communication, March 8, 2002.

Using Advocacy's data on SIC 7999, a typical small business in this category generated approximately \$300,000 in annual revenue. Therefore, this proposal would require a firm to use 3% of its annual revenue to comply. Advocacy asserts that 3% of a firm's revenue to comply is indeed significant. If 10% of the revenue generated by the typical firm in this category were profit, and this firm had to comply with this rule, the firm would have to forgo 30% of its profit. If a 7% profit margin were the minimum necessary for this business to remain in business, this business would not remain in business.

Unfortunately, the Coast Guard's cost estimates failed to take into account costs associated with installation, operation and maintenance, and underestimated the costs of equipment.¹⁷ However, even if only a tiny fraction of these additional costs were included, the compliance cost as a percent of revenue would increase to 10%, which means that the typical firm would have spend virtually 100% of its profit just to comply with this rule.¹⁸

The Coast Guard Must Prepare an IRFA

In that this rule will have a significant economic impact on a substantial number of small entities, the law requires the Coast Guard to prepare an IRFA. Not only will the IRFA allow the agency to fully explore the economic impacts of this rule, it will allow the agency to consider less costly alternatives for the rule, such as examining whether warning signs alone would be sufficient. Most importantly, an IRFA will force the agency to fully examine the need for the rule and whether the proposed solution will address the problem.

¹⁷ See Suttie, Mark. Letter to Coast Guard regarding Federal Requirements for Propeller Injury Avoidance, March 8, 2002, which presents significantly higher estimates of the equipment costs and includes the costs for installation, operation, and maintenance. Mr. Suttie has substantiated these estimates. See the National Marine Manufacturer Association's March 11, 2002, comment letter to the Coast Guard on this proposal.

¹⁸ *Id.* Mr. Suttie indicated that his company owns 400 houseboats and has to fix 4,000 propellers per year, but that with propeller guards, his company has had to replace the propeller and at times the gears, because the guards can cause significant collateral damage. Since on average, any given propeller on any boat has to be replaced 5 times (4,000/400x2), and the guard must be replaced each time, the cost per boat per year is 2 propellers/boat x 5 replacements/propeller/year x \$300/guard = \$3000 and \$3000/\$300,000 x 100% = 10%.

Conclusion

Public policy and the law mandate a legitimate basis and rationality for the implementation of a regulation by the Coast Guard. It is unreasonable to require the public to incur costs to comply with a regulation that may not be needed or provide an appropriate remedy for a perceived harm that it is supposed to address. The law requires an agency to provide the public with a rational explanation for its actions as well as an analysis of the potential economic impact of the rule. To implement and enforce such a regulation without complying with the law is bad public policy. The only way to address the present proposal, which fails to comply with the APA and the RFA, is to withdraw the rule, reevaluate its need, and if necessary, repropose with a solution that addresses the problem and minimizes the impact on small entities.

Thank you for the opportunity to comment on this important proposal. If you have any questions, please feel free to contact the Office of Advocacy at (202) 205-6533.

Sincerely,

Thomas M. Sullivan
Chief Counsel for Advocacy

Austin R. Perez
Assistant Advocate for Energy
and Environmental Policy

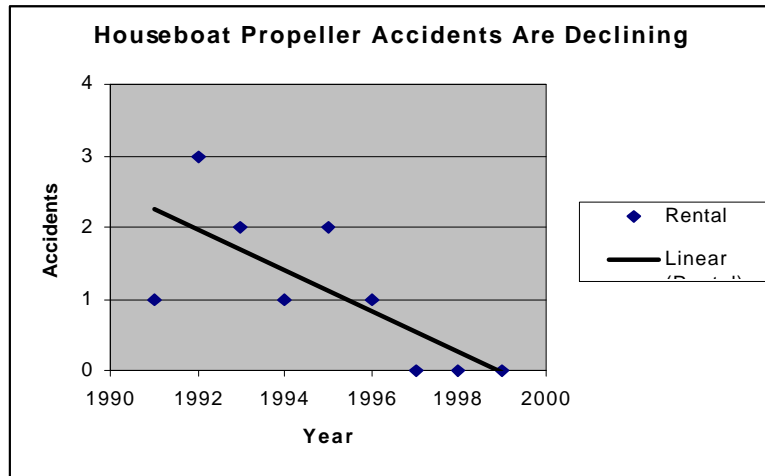
Jennifer A. Smith
Assistant Chief Counsel
For Economic Regulation

Appendix

A reviewer provided Advocacy with reports from the Coast Guard’s Accident Reporting Database (BARD) for the 10-year period, 1991-2000, for both rented houseboats and all houseboats, selecting all accidents resulting in injury or death as a result of contact with a propeller or engine.¹⁹ Accidents just from boat contact were excluded. Based on this, the reviewer compared the average number of accidents per year for the first five years (1991-1995) with the average for the second five years (1996-2000), and found that accidents have in fact been declining. A more complete summary of the information is presented in the following table.

Year	Rental Houseboats			All Houseboats		
	Injury	Fatality	Total	Injury	Fatality	Total
1991	1	0	1	1	0	1
1992	3	0	3	4	0	4
1993	1	1	2	5	1	6
1994	1	0	1	0	0	0
1995	1	1	2	3	1	4
1996	1	0	1	3	0	3
1997	0	0	0	0	0	0
1998	0	0	0	0	0	0
1999	0	0	0	2	0	2

Using this information, Advocacy plotted the accident data over time and fitted a curve to the data using the “ordinary least squares” method. Rental houseboat propeller accidents have also been declining for the last 10 years.



¹⁹ Snyder (letter).