

UNITED STATES OF AMERICA  
NATIONAL TRANSPORTATION SAFETY BOARD  
WASHINGTON, D.C.

ISSUED: June 1, 1971

Adopted by the NATIONAL TRANSPORTATION SAFETY BOARD  
at its office in Washington, D. C.  
on the 19th day of May 1971

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FORWARDED TO: )  
Admiral Chester R. Bender )  
Commandant )  
U. S. Coast Guard )  
Washington, D. C. 20590 )  
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SAFETY RECOMMENDATION M-71-7

This is an emergency recommendation based upon your memorandum of April 30, 1971, concerning tests of barge lighting made in response to National Transportation Safety Board recommendations in the SS UNION FAITH and M/V WARREN J. DOUCET report. We believe that prompt action is needed to prevent other marine casualties which could result at any time from inadequate battery-operated navigation lights of the specific type and general class described in your memorandum.

The test results which you furnished us in response to our Recommendation No. 5 indicated, for the type of Perko light involved in the accident, a light output only 2 percent of that necessary to meet the regulation. The Board has already indicated that a factor in the failure of the UNION FAITH to detect the WARREN J. DOUCET and the position of its tow was "probable insufficiency of the navigation lights on the barge I.O.C. No. 7 to draw attention to its location." This finding that the green light had only 2 percent of the required light output tends to confirm this probability.

The Perko light appears to be typical of such currently available battery-powered lights, and if this is true as your memorandum indicates, a large number of these barges are operating with grossly inadequate lights.

Your memorandum did not indicate any enforcement measures being taken in response to our Recommendation No. 4. It is anticipated that some time would be required to secure complete enforcement, especially if it is assumed that new systems would have to be developed to meet the performance requirements of the applicable Rules of the Road.

It is also known that some barge lights are being powered by 115-volt systems which, of course, provide sufficient power to meet the lighting requirements. We know of no regulatory prohibition against providing lighting power from the towing vessel. Battery-powered systems of much higher voltage are also possible, although more expensive.

We believe that prompt interim steps are necessary to prevent further catastrophic collisions involving this causal factor while a more exact solution is being produced.

The Safety Board therefore recommends that the U. S. Coast Guard consider the following emergency and longer term measures:

1. Direct warnings to deck officers, pilots, operators of barges, and manufacturers of navigation lights, by means of prominently published announcements, to the effect that portable, battery-powered navigation lights, which do not comply with the guidelines prescribed in 46 CFR 111.75-15(g)(7), probably do not meet the performance requirements of the Rules of the Road. Specifically warn against light systems using voltages less than those shown in the referenced regulation.
2. Issue an immediate general warning to all waterway users to be on the alert for barges which may be hard to detect against a background of brighter lights, and describe typical circumstances where the lights may be obscured.
3. Conduct an enforcement program to end the use of inadequately powered lights on all barges within a reasonable period of time. The Safety Board would appreciate being apprised of the Coast Guard plans for enforcement and time schedule as soon as plans are prepared.


The effect of these recommendations, when followed by those to whom addressed, would be to limit the use of navigation lights for barges to those types which are included in the recommended list of the existing regulations or which can be shown to pass the candlepower requirement of the regulation by test. The Board has reason to believe there are no commercially available 3-volt light systems which can meet the basic candlepower requirements of 46 CFR 111.75-15(g)(7) for navigation sidelights.

We recognize that some practical problems are involved in implementing enforcement measures and that rapid changes in lighting systems of many barges will require concentrated action. It has already been noted that some time will be required to secure complete enforcement. However, the Safety Board is vitally concerned that no further casualties occur from this causal factor. The recommendations include steps which will reduce risk while enforcement is proceeding and which will speed enforcement.

Your views on our recommended immediate action are required, especially as to methods of achieving the most rapid and widespread awareness of the extreme hazard in circumstances of operations in which the inadequacy is found. We would be pleased to discuss any alternatives.

These recommendations will be released to the public on the issue date shown above. No public dissemination of the contents of this document should be made prior to that date.

Reed, Chairman; Laurel, McAdams, Thayer, and Burgess, Members, concurred in the above recommendation.

  
By: John H. Reed  
Chairman