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RECOMMENDATIONS

The Safety Board recommends that:

- 1. The Secretary of the Department of Transportation initiate the development and adoption of a risk-based framework for evaluation and planning of dangerous goods transportation safety regulations or programs in the Department, by a project leading to development of the analytical methods for risk identification and evaluation required for its implementation through a designated organization within the Department. (H 7) Q 7
- 2. The modal administrators in the Department of Transportation require application of such a framework as it develops and use of risk-based analytical methods in the formulation of the dangerous goods regulatory programs, including special permits, in each mode, for both intra- and intermodal shipments at the earliest possible date. It appears that risk-based methods should be used first on bulk shipments.
- 3. The Secretary consider the formation of an advisory group or groups bringing together, under the auspices of an organization such as the National Academy of Sciences, representatives of the point of view of all parties—at—risk, including the population along pathways of movement, to assist the Department of Transportation in the development of the risk identification and risk evaluation aspects of the risk-based framework and analytical methods. The use of existing advisory groups should be considered, where they include the point of view of all major segments of the population—at—risk. (// //- 2 %)
- 4. Technical advisors representing the point of view of a partyat-risk, or other parties (including academic institutions and nonfederal public agencies) having a clear and continuing interest in
 dangerous goods transportation safety, be required to have experience
 or capabilities in systems safety analysis techniques or be in training in such techniques in order to serve on such advisory groups. (/+ >/ 3),
- 5. Each private organization or agency whose activities require an interest in industry or code standards affecting the safe transportation of dangerous goods begin to develop and employ risk-based concepts and methods to the maximum extent feasible in its projects, to gain experience in the use of techniques, and to assist the Department of Transportation by providing points of experience able to deal with DOT use of risk-based evaluation concepts. (/- 7/- 3/)

6. The Department of Transportation organization managing this project publish, at not over semiannual intervals, reports of the progress in the development of risk-based methods of evaluating regulations and programs, and their application to specific dangerous goods systems. $(H-7)-3\partial$

BY THE NATIONAL TRANSPORTATION SAFETY BOARD:

/s/	JOHN H. REED
	Chairman
/s/	OSCAR M. LAUREL
	Member
/s/	FRANCIS H. McADAMS
	Member
/s/	LOUIS M. THAYER
	Member
/s/	ISABEL A. BURGESS
	Member

January 27, 1971