## NATIONAL TRANSPORTATION SAFETY BOARD WASHINGTON, D.C.

ISSUED: October 1, 1974

Forwarded to:

Honorable Alexander P. Butterfield Administrator Federal Aviation Administration Washington, D. C. 20591

SAFETY RECOMMENDATION(S)

A-74-65 & 66

On November 3, 1973, a Pan American World Airways B-707-321C (N458PA) was involved in an accident at Boston, Massachusetts. The National Transportation Safety Board's continuing investigation has disclosed information which should be brought immediately to the attention of carriers and regulatory agencies that are concerned with the air carriage of certain dangerous articles on cargo airplanes.

The Safety Board has found that accessibility by flightcrews to dangerous articles as required by 14 CFR 103.31 is severely limited on a cargo airplane that is fully loaded with palletized cargo.

Cargo accessibility required by 14 CFR 103 and the provisions of 14 CFR 121 for smoke evacuation and fire control or containment will not enable a flightcrew to cope safely with in-flight occurrences of smoke or fire from self-sustaining chemical reactions of dangerous articles. These regulatory requirements might mislead flightcrews in their assessment of whether their safety is seriously threatened when self-sustaining chemical reactions of restricted cargo occur in flight.

The National Transportation Safety Board, therefore, recommends that the Federal Aviation Administration:

(1) Issue appropriate notices to alert air carriers to inform flightcrews who may be involved in carriage of certain dangerous articles capable of producing self-sustaining chemical reactions that reliable in-flight threat assessment of problems associated with such articles often will be extremely difficult, if not impossible.

(2) Advise air carriers to inform flightcrews that smoke or fire caused by oxidizing agents and certain other chemicals cannot be controlled by existing emergency procedures, and that any abnormal in-flight occurrence which could be linked to dangerous articles should be considered an unsafe condition as prescribed by 14 CFR 121.557 and .559, requiring an immediate decision and action to "Land the airplane at the nearest suitable airport, in point of time, at which a safe landing can be made."

Our staff is available for further consultation in this matter.

REED, Chairman, McADAMS, THAYER, BURGESS, and HALEY, Members, concurred in the above recommendations.

By: V John H. Reed

THESE RECOMMENDATIONS WILL BE RELEASED TO THE PUBLIC ON THE ISSUE DATE SHOWN ABOVE. NO PUBLIC DISSEMINATION OF THE CONTENTS SHOULD BE MADE PRIOR TO THAT DATE.