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NATIONAL BUREAU OF STANDARDS REPORT

NBS PROJECT

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September 16, 1968

NBS REPORT

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Progress Report

"Hazardous Combustible Characteristics of Cabin Materials"

July to September 1968

by

D. Gross

FAA Project No. 510-001-11X

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U.S. DEPARTMENT OF COMMERCE
NATIONAL BUREAU OF STANDARDS

Progress Report

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Smoke and Toxic Gases

Approximately 200 copies of our final report, "Smoke and Gases Produced by Burning Aircraft Interior Materials," FAA Report No. NA-68-36 (DS-68-16) were forwarded to NAFEC. This report incorporated changes and corrections to meet FAA report requirements.

Information on the smoke density from the flaming combustion of kerosene and other liquid fuels, for comparison with aircraft interior materials, was forwarded to FAA. Round-robin smoke data on seven materials (2 Labs.) and round-robin radiant panel data on five materials (3 Labs.) were summarized and forwarded to FAA.

Additional analysis and evaluation of the smoke test results on 143 materials were carried out to support FAA Flight Standards in their consideration of smoke-limiting regulations.

Model Enclosures

A progress report summarizing the tests performed in FY 1968 was drafted. Based upon a study of these findings, the next phase of the program will be directed toward (a) estimating an overall heat balance, and (b) investigating the propagation of flaming from a distributed fire load (simulating seat cushions) in the small enclosure. Additionally, studies will be extended to a longer lox, and with a variety of typical wall lining materials, as time permits.

