

MINUTES
of the
GOVERNMENT TECHNICAL & RESEARCH COMMITTEE MEETING
Afternoon Joint Session
Washington, D. C. May 21, 1963

In addition to those attending the morning Marine and Land Sessions, the following were present:

John M. Dorsey	U. S. Coast Guard
D. E. McDaniel	U.S. Coast Guard
R. C. Hale	U. S. Coast Guard
S. A. Heider	Federal Housing Admin.

The meeting was called to order by W. E. Miller

ECONOMIC THICKNESS (LOW TEMPERATURE STUDY)

C. E. Ernst reported that the Low Temperature Study for a companion volume to the Manual of Economic Thickness of Insulation on Surfaces at Elevated Temperatures, has been completed; the calculations made and the volume prepared in a preliminary form which he displayed. He discussed briefly the data and the calculations necessitated by the temperature range covered.

As in the other manual, for a specific case the installed cost of insulation and other fixed and operating costs are combined in a single "D" factor from which economic thickness is derived using pipe size, thermal conductivity and the difference between operating and ambient temperatures.

For low temperatures, the insulation thickness required to prevent condensation is usually important and may be a governing factor, where it is greater than the economic thickness. It was not found feasible to combine tables showing both thicknesses, but instructions and charts for the thicknesses to prevent condensation will be available along with the book.

It is anticipated that the book may be available in the next three or four months.

FEDERAL SPECIFICATION HH-I-551c "Insulation Block, Pipe Covering and Boards, Thermal (Cellular Glass)" - Issued March 5, 1963

Discussion was led by V. L. Miller, who explained that although the Interim Specification HH-I-00551b was issued over a year ago and most of the questions resolved, the present Revision "C" still contained some points for discussion and resolution.

Particular attention was called to Paragraph 3.13 Fire Hazard Classification which applies to all classes in Types II and III. The manufacturer has pointed out that Type II Class 3 material has the glass fabric applied with hot asphalt. For its major use (underground lines), this is an advantage and no hazard whatever. However, it probably could not be said to conform to paragraph 3.13 although the test method UL 723 cannot be applied directly to pipe insulation sections.

It was agreed that positive solution would involve re-writing 3.13 to delete reference to Types II and III and limit it to Class 2 and 4 of Type II with a statement that Class 4 be used when the fire hazard values were required in the job specification.

FIRE TESTS (INCOMBUSTIBLE INSULATIONS)

1. Definitions - Mr. King stated the desireability of agreement on a definition of non-combustibility and cited the NFPA definition in Standard #220 as a possible form.

2. Basic Requirements - Mr. Hale of the Coast Guard discussed the "heated tube" method as the basis of their definition and stated that for marine construction, particularly for passenger vessels, their requirements must conform to certain international agreements. The basic principle involved is that the ship design shall be such that a fire starting in a given area (of limited size) shall be contained within that area and not spread to others.

3. The FHA representative stated their interest in duct systems utilized for heating. There is current test work on evaluation of fire tests on both circular and rectangular forms with results indicating little correlation with other Fire Hazard Test methods.

The meeting was adjourned about 3:15 P.M.

K. M. Ritchie