INTRODUCTORY REMARKS

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George S. Vincent

Bureau of Public Roads

In attacking the problem of the effect of wind on structures, our approach is necessarily divided. No single mind, so to speak, comprehends the available knowledge of the nature of the wind and at the same time its effect upon a structure. The structural engineer can gain a conception of the wind only through its observed effects on a given structure in a given instance. In the past, specifications and codes defining design wind loads have often been developed by computing what uniform pressure would have been required to wreak the observed havoc on a particular structure. The meteorologist, however, knows that this presents a very unreal picture of the invisible structure of the wind. The truer concept might indicate a wind which would have an entirely different effect on a slightly different structure than might be computed on the basis used in the engineer's analysis.

On the other hand, the meteorologist, with his superior comprehension of the character of the wind, may be at a loss to know which of its characteristics are most significant in relation to a structure under consideration.

A conference of this kind brings these two aspects of man's knowledge of the wind into closer relation. The papers in this particular group are addressed primarily to the meteorologists. They show the engineer's attempts to study the effects of wind on specific structures and may serve to suggest to the meteorologists those characteristics of the wind and those elements of his own knowledge which come closest to bear upon the engineering problems described.

Other sessions of the conference will serve to acquaint the structural engineer with the resources which the meteorologist can bring to bear upon the engineer's problem of wind forces, but this is a matter to be considered elsewhere in this publication.

J. M. Biggs et al., *Topics in Engineering Meteorology*