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By Professor RICHARD STEVENS BURINGTON
DEPARTMENT OF MATHEMATICS, THE CASE SCHOOL OF APPLIED SCIENCE (ON LEAVE)
HEAD MATHEMATICIAN, BUREAU OF ORDNANCE, NAVY DEPARTMENT

(1) For the past several years it has been my privilege to have intimate contact with a large amount of work concerned with an array of investigations in engineering, physical research and related activities, and with work in which all sorts of mathematical and physical fields appear as fundamental items in the larger problems under study. The nature of this work has been such that much of it, as met, would not be suitable for discussion here. Nevertheless, there are certain important facts and observations which I have noted from time to time that I hope will be of interest to many persons—to engineers, physicists, chemists, investigators, businessmen, industrialists, as well as to pure and applied mathematicians, and university people. Some of these items may well be made the subject of serious study, and such action as may be indicated should then be pushed vigorously by responsible individuals and organizations.

In discussing this topic, “New Frontiers”—some new, some old, some always new—I have in mind the vast store of potentially powerful and valuable mathematical knowledge and talent which has scarcely been tapped by industry and business. I should like to