



The Thayer School of Engineering

DARTMOUTH COLLEGE · HANOVER · NEW HAMPSHIRE · 03755

June 30, 1965

Mr. Eugene F. Adiutori
President
Stability Consultants
P. O. Box 18962
Cincinnati, Ohio 45218

Dear Mr. Adiutori:

Thank you for your letter of June 14th.

I would be glad to have you give a lecture on July 9th in the afternoon on a subject of your choice. It will be of interest to see how your ideas fit in with the rest of the course material. If it fits in with your plans, I should also like to have lunch with you so that we can discuss informally outside the course framework.

The thermal stability which you mention in your letter is what I would call "first-order thermal instability" and is exactly analogous to the similar situation which arises with pressure drop when one couples a pump to a boiler channel or puts an orifice at the inlet to a heated channel. I agree with your analysis and comments on Berenson's work which seems quite obvious once you have pointed it out.

As far as nucleate boiling is concerned I don't think that any simple equation gives all the answers since one can get almost any possible results by varying the surface characteristics. For some applications your equation may be more useful whereas for others the ΔT^n formulation may be better.

I look forward to meeting you and hope that you will be able to come.

Yours sincerely,

G. B. Wallis
Associate Professor of
Engineering

GBW/jes