STATOTHR

[redacted]

Ref: E80

[redacted] 5 November 1963

STATOTHR

[redacted]

Washington, D. C.

Declass Review, NIMA/DoD

Dear Ray:

We have made some further calculations, after speaking with you last, regarding both the cooling air and vacuum requirments.

The system, consisting of an electrical control cabinet and the high speed coordinatograph, may need to dissipate about 26,000 BTU per hour. Considering the various temperature rises in each of the elements, a total capacity of about 600 cubic feet per minute of 42° F. inlet air is needed, and if, as you mentioned, the inlet air temperature becomes as high as 50°F., the requirement jumps to 750 cfm. Above 50°, the volume rises even higher. Higher volumes require bulkier air handling equipment and produce more air noise so naturally, it is desirable to obtain low inlet temperatures. Regarding the vacuum, we estimate that 50 to 80 cfm of 1 psi vacuum is sufficient to do the job, depending upon the porosity of the paper used for charts.

55° = 1000 cfm

I would be delighted to discuss both these problems more fully with your building superintendent if you will have him call me.

Sincerely,

STATOTHR

[redacted]

Project Engineer

TWT:P