



Interoffice Communication

To ALE, TRL, AFG

From C. G. Rooks

Date March 8, 1974

Subject Air Movement Capabilities in V-12 Reactor Building

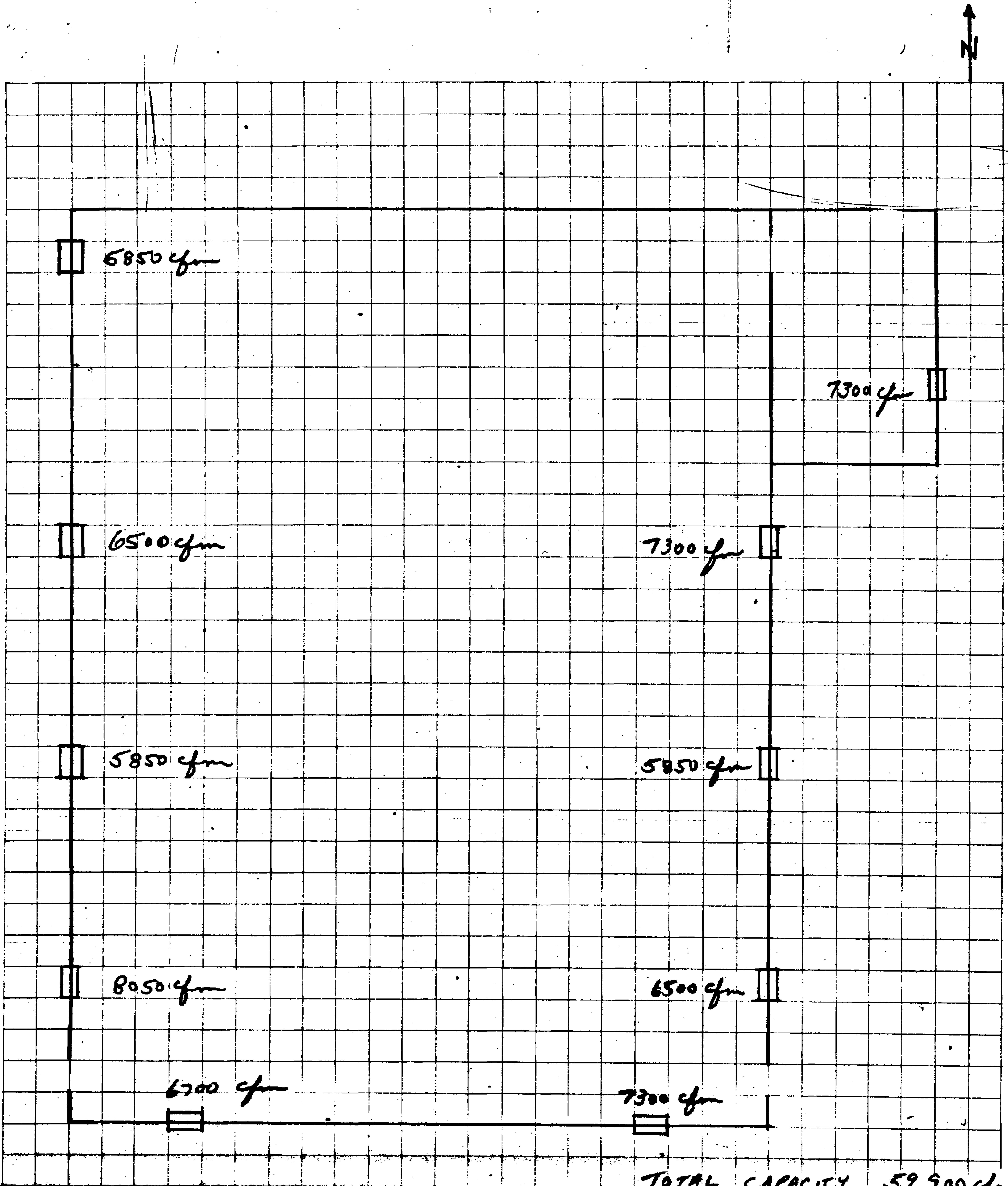
Air velocity measurements were taken on all wall ventilators on the lower level in V-12 building. The second floor fans, similar to those downstairs, were assumed to have the same capacity. The capacities of the large roof ventilators were taken from performance specifications.

With the above as a basis, the total fan capacity for the first floor is estimated to be 59,900 cfm., and for the second floor approximately 51,800 cfm. The total air movement capabilities in V-12 is estimated to be 111,700 cfm. (Capacities of individual fans are given on the attached sketches.) The fan in the east wall under the stairwell was not included in lower level calculations.

Assuming the volume of all the reactor buildings is approximately the same, the air turnover rate for the building is calculated to be 0.78 turnover/min.

C G Rooks
C. G. Rooks
Process Engineer

cc: EMS, GNP, RJF, FJS, RWS



19-231-PB

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PAGE _____ OF _____

CONTINENTAL OIL COMPANY
CALCULATION SHEET

TITLE EXHAUST FANS

V-12 DOWN STAIRS

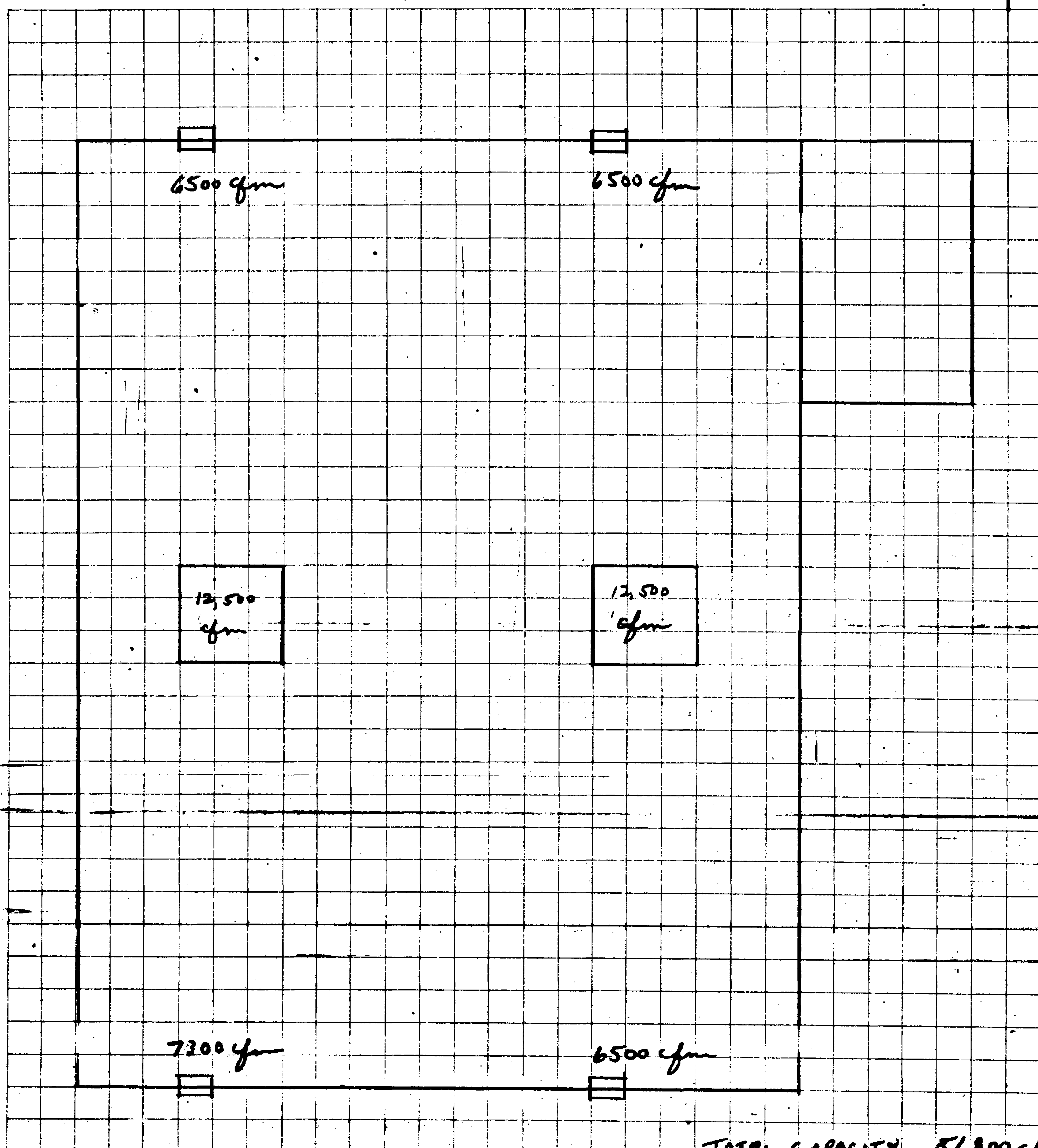
JOB NO. _____

FIELD _____

STATE _____

VAB.0001043375

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TOTAL CAPACITY 51,800 cfm

13-231-PB

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CONTINENTAL OIL COMPANY
CALCULATION SHEET

TITLE EXHAUST FANS

V-12 UPSTAIRS

JOB NO. _____

FIELD _____

STATE _____

VAB.0001043376