INTERDEPARTMENTAL

MASSACHUSETTS INSTITUTE OF TECHNOLOGY *CAMBRIDGE, MASS. 02139*

from the office of

October 30, 1969

Mr. Morton Berlan
Telecommunications Office
E18-204

Dear Mort:

This note is to follow up our telephone conversation of October 29, about busy signals and grading problems on level eight of the DataSwitch.

In August and September, our system programmers succeeded in loading level eight of the dataswitch to the point that busy signals were obtained; we noted the pattern of busy and free trunks and reported them at that time. Since October 1, we have begun taking on outside paying (M.I.T.) users and the load has again increased to the point that busy signals are obtained, except that now a busy signal can mean potential loss of revenue at the time or, more seriously, a customer decision not to use the system for an extended period. We, therefore, consider prompt action to be of quite high priority.

As information input to the grading process, the following observations have been made:

1. When busy signals are obtained, trunks 111, 112, 113, 123, 124, 128 and 132 are almost always observed to be <u>not</u> in use. It would appear appropriate to have these trunks come up on many more points on the grading sheet.

2. When busy signals are obtained, trunks 101-108, 130 and 131 are always <u>in use</u>. These trunks should probably come up on fewer points in the grading pattern.

3. When busy signals are obtained, trunks 114, 116, 119, 122 and 126 are almost always <u>in use</u>. Since these trunks only appear at one point each in the grading pattern, the shelf that they serve probably receives high usage.

I hope that this information may be useful to you or the Telephone Company.

Sincerely yours,

Jerome H. Saltzer
Assistant Professor of
Electrical Engineering

JHS/bm