over that portion of trace for which it was designed and new

operators were designed and used down the trace. The operators

were designed from autocorrelations of one and two seconds in

length. Autocorrelations of the data were taken before

deconvolution to assist in the choosing of parameters. Auto-

correlations of the same points were taken after deconvolution

to check the results of the program.

AUTO-CORRELATION PROGRAM

In the processing of this data two types of autocorrelations

were made, both before and after deconvolution, and prints

of these autocorrelations were sent with the data. In one

type of autocorrelation made, one section of trace was used.

This section of trace was 2400 ms. long and the correlations

started about 150 ms. below the first arrival energy. In the

second type of autocorrelation, two separate zones of trace,

each 1000 ms. long, were used. The start of correlation in these

zones was two seconds and three seconds respectively. The scale

of the autocorrelograms sent is 200 ms. per inch.

VELOCITY ANALYSIS AND DETERMINATION

Preliminary velocities were determined by means of the Velan

(Velocity Analysis) Program. In this program, vertical

velocities are automatically determined from the crosscorrelation

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