

R1 were of satisfactory length and fair to good quality; a reasonable length of high velocity refraction was recorded on all three. NEF R5 was fair to poor quality but recorded high velocity refractions while NEF R5R was useful only for two thirds of its length and recorded only the lower velocities. Profiles NEF R4 and R4R were of fair to very poor quality and only the lower velocities were recognisable, however, these profiles assisted in the assessment of sonabuoy drift. NEF R2 showed results of fair to poor quality over the first 75% of its length but recorded only low velocities. NEF R2R was very poor and no usable data was recorded. Time Variant Amplitude Scaling of traces was very useful, particularly in the case of high velocities.

Refraction velocities were selected from the profile playouts and plotted in their relative positions (Plate 1). It was immediately apparent that some sonabuoy drift had occurred and due to early failure of the sonabucys it had not been possible to make an assessment of this drift during marine operations. Corrections for drift were therefore calculated from pairs of profiles as follows.

The time of recording each profile between the initial positions of each sonabuoy of a pair of profiles was calculated from the operations log and noted on the refraction plot (Plate 1). The apparent rate of buoy drift was calculated by the formula -