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## **SEMIANNUAL TECHNICAL REPORT NORSAR PHASE 3**

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## E. A CHERNOV MEDIUM ANALYSIS AT NORSAR

An analysis of the P-wave scattering taking place under NORSAR has been made. Totally 33 events and 54 instruments (subarrays 01A, 01B, 02B, 03B, 04B, 06B, 07B, 06C) have been used. The procedure applied is much the same as that of Aki (1973). That is, the phase and amplitude spectrum have been calculated within a time window of 5 seconds, starting at the arrival time given from the NORSAR plane wavefront estimate. Phase lag and amplitude were calculated at the frequencies 0.6, 0.8, 1.2, 1.6 and 2.0 Hz. The main conclusion from this analysis is that the P-wave scattering taking place under NORSAR is too strong for the Born (Chernov 1960) approximation to be fulfilled. This seems valid for all the frequencies For further information see Capon and Berteussen tested. (1973).

> J. Capon (M.I.T. Lincoln Lab) K.A. Berteussen

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