

Followup email from Arnold Arons after OASL talk

The talk I gave at the acoustics group was primarily concerned with the first paper on your list -- the one on phase distortion ("Phase distortion of acoustic pulses obliquely reflected from a medium of higher sound velocity." J. Acoust. Soc. Am., 22(2), 231-237, 1950.). I warned the group, however, that the solution given in this paper is incomplete because it is a plane wave solution which fails to obey a fundamental restriction on the impulse transmitted by acoustic waves. The complete solution has to be a spherical wave solution, which is considerable more complicated. The complete spherical wave solution was derived by my former Amherst colleague Dudley Towne and is contained in JASA 44(1),65-76 (1968). All good wishes,

Arnold