5. page 168, discussion: I should had added more discussion here. The wave-slope wind-speed Eqs. (4.32) are often called (as I did here) the Cox-Munk *capillary* wave slope equations. This is permissible, because the equations do give the slopes of capillary waves fairly well. However, it should be emphasized that these equations also represent the slopes of a gravity-capillary wave surface. Recall that Duntley measured the slopes of capillary waves, and Cox and Munk deduced (indirectly, from an airplane) the slope statistics of a gravity-capillary wave surface. The fact that these two quite different experiments gave nearly the same results rests on the fact that most of the variance in the *slope* of the sea surface is due to the shortest wavelength (capillary) waves. Most of the variance in the *amplitude* of the surface waves is due to the longest (gravity) waves. For optics, it is the slope of the surface that is most important because the slope determines the angles entering the Fresnel reflectance equations for an incident ray. The amplitude of the waves determines the amount of wave "shadowing" at low solar elevations and influences multiple scattering between gravity waves, but these effects are secondary except for near-grazing lines of sight and near-horizon sun positions. Thus Eqs. (4.32) can be used to model a gravity-capillary sea surface with reasonable accuracy for many oceanographic purposes. This is what is done in Hydrolight, as discussed in the next note.

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