

# Donald Chivens' Commentary on "Cost of Design Improvement"

Commentary On  
Cost of Design Improvement

Philip had no obligation to investigate the idea on his own time or as promptly as he did. His dedication to solving the "design problem" over a weekend indicates that he is a highly motivated and professional engineer. The resulting business decision of how and when to discuss the proposed design change with the customer appears to offer the opportunity to gain customer loyalty with very little risk of misinterpretation. I would select choice 3 (Tell GFI about the improvement and offer to make the improvement if GFI is willing to take care of the additional expenses). I would also remain open to negotiating to share the additional expenses (choice 1), but the improvement was engineered at no cost to GFI. So GFI could be expected to pay the additional production costs if they choose to implement the change. GFI should be pleased to have a supplier this concerned about quality, and GFI should be the one to make the decision. Both Philip and Tim are ethically thinking along the same lines.

Not to tell GFI about the improved design until after the order is completed (choice 4) would not violate any legal obligation, but is ethically questionable. In proposing this option, Connie is looking only at short term profit, not an uncommon trait of financial managers. Ethically, GFI is a "stakeholder" in this decision, and they should participate in it. In fact, if GFI were presented with the improvement at the time of a later order, they would very likely conclude (correctly) that the improvement was known earlier as suggested by Tim. Choice 4 is therefore not only questionable on ethical terms, but a poor business risk.

The decision of how and when to incorporate design improvements is indeed difficult. In addition to recurring part cost, variables frequently include tooling cost, cost of production fixture changes, inventory, retrofitability, coordination with field service, affect on certification (such as UL) and others. When only money is involved, the ethically appropriate approach is to involve all financial stakeholders in the decision. If safety is involved, the public could become a stakeholder, and the

decision is much more difficult.