TO: Vivian Weil, CSEP

FROM: Michael Davis, CSEP

DATE: April 8, 1995

SUBJECT: Hollander e-mail/Software Proposal

What I shall try to do here is respond to RH's questions (more or less) as asked (incorporating your handwritten notes as I go). I believe the result of this exercise is the outline of a response, a codicil to our proposal rather than a rewrite of it.

Why have you selected that group (the Task Force on Software Engineering Ethics and Professional Practices)?

One reason, of course, is that its domain corresponds most closely to the long-term work of CSEP (and the expertise of the principal investigators). We are an ethics center, not (like Carnegie-Mellon's Institute for Software Engineering) a center concerned with purely technical standards. Of the three task forces, we are most likely to be both effective researchers and effective participants in this one. We have chosen the task force that speaks our language.

A second reason is that the cooperation of two powerful professions (electrical engineering and computer science) creates a field with fewer settled questions than is usually the case when a new profession (say, environmental engineering) simply branches off. Engineers and computer scientists are similar enough to understand each other, yet different enough to require an explicitness about professional matters not necessary within a profession unified by history. We expect members of the task force to be surprised from time to time by the standards members of the other profession take for granted (for example, by the different gloss the engineers and computer scientists give to the term "software engineer").

A third reason is that we are in a position to confirm, or disconfirm, certain views of professions, especially of their codes of ethics, common in the literature of professions. For example, it is common to claim that codes are meant to serve the profession at the expense of the public, that they are designed not to be followed but to hoodwink the public, that they are meant to protect the powerful within the profession from the upstarts, or that they are a conspiracy against an otherwise fair market. Such claims, common in the sociology of professions, do not seem to rest on a careful study of the process by which professions in fact come into existence (in part, no doubt,

because that process is seldom well-documented). [Here perhaps is a place to cite a few standard works of the sort I have in mind.]

Is this effort likely to tell us something important about professions in relationship to society?

our hypothesis is that most arguments, especially those generally treated as legitimate, will fall into one the following categories: a) those that appeal to what's practical (what can you really expect people like us to do?); b) those that appeal to the public welfare (or, at least, the welfare of employers and users); c) those that appeal to what the public (or, at least) employers and users) want (whether it's good for them or not); and d) those concerned with consistency between software developers and those with whom they work or want to be allied (for example, the standards of the ACM or IEEE). Davis has, of course, long argued for something like this interpretation of codes. But, until now, he has had to do so using the codes themselves, explaining what they actually say in less jaundiced terms than has been common or pointing to the direction of change over time. That, of course, is not nearly so satisfactory a way to counter the common view as simply saying, "Here's the debate: where are the selfish interests?"

Our method will be a) to identify (kinds of) argument made to justify shaping the standards this way rather that and b) to gauge what part they play in the process (e.g., how often they are made, how often treated as decisive, respectable, woolly, or beyond-the-pale). We will, in short, be doing simple content analysis.

While we do have a hypothesis, we are on a "fishing expedition"—and should be proud of it. Our chosen task force has had a slow start (despite the co-chairs' efforts). We are already wondering whether starting a new profession, even with adequate resources, might be considerably harder than the standard literature led us to expect. That is something we will want to pay attention to. We hope for more such surprises.