Guidelines for Engineers Dissenting on Ethical Grounds (www.onlineethics.org)

- **Introduction**
- **Guidelines** *(IEEE Ethics Committee 11/11/96)*
  - Establish a clear technical foundation
  - Keep your arguments on a high professional plane
  - Try to catch problems early, and work with the lowest managerial level possible
  - Make sure that the issue is sufficiently important
  - Use organizational dispute resolution mechanisms
  - Keep records and collect paper
  - Resigning
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Introduction

- The goal of these guidelines is to provide general advice to engineers, including engineering managers, who find themselves in conflicts with management over matters with ethical implications.
- Much of this advice is pertinent to more general conflicts within organizations.
  - For example, it is not unusual in technical organizations for there to be hard fought battles regarding purely technical decisions that do not necessarily have any ethical implications—but do have impacts on the probabilities of success of products.
- The assumption here is that the engineer's objective is to prevent some serious harm, while minimizing career damage.

Introduction

- Many ethics related disputes are caused by attempts to satisfy irreconcilable constraints.
  - For example, suppose it is impossible to test a product adequately in time to meet a delivery date.
  - Missing the delivery date constitutes a highly visible failure, with clearly defined penalties.
  - There may be no obvious indication that an important set of tests has been omitted, even if this leads to a substantial increase in the probability of a life threatening system failure.
- Under such conditions, there is a temptation to meet the deadline by skipping or shortening the tests.
Establish a clear technical foundation

• One should check out the alleged facts and technical arguments as thoroughly as possible
  – If feasible, get the advice of colleagues that you respect
  – Carefully consider counter-arguments made by others
  – A good way to ensure that you understand someone else's position, is to restate it to the satisfaction of that person

• At any stage, if convinced that the other person’s arguments are valid, do not hesitate to change your position accordingly

• This does NOT mean that you must be able to validate your position with near mathematical certainty
  – This is seldom possible in the real world
  – In most engineering work, we must operate with incomplete information and make reasonable engineering judgments

Keep your arguments on a high professional plane

• Do not mix personal grievances into an argument about whether further testing is necessary for some critical subsystem

• Keep calm and avoid impugning the motives of an opponent
  – There might be a situation in which the central issue is that an incompetent person has been given critical responsibilities
  – In that case, it may be necessary to attack that person's qualifications (this should be done without malice)

• Try to structure the situation so that accepting your position will involve as little embarrassment as possible to those being asked to change a decision

• Avoid overstating your case
  – Your credibility can be seriously undermined by exaggerated, invalid figures--even on matters not central to the main issue
Try to catch problems early

- Try to catch problems early, and keep the argument at the lowest managerial level possible
  - Calling attention to a problem at an early stage makes a satisfactory solution much more likely
  - As time goes on, personal commitments to a particular course of action become deeper, and making changes becomes increasingly expensive
  - It is always less costly to resolve the dispute at the lowest organizational level possible
  - Move up the chain of command only when it is clear that this is necessary

Before going out on a limb, make sure that the issue is sufficiently important

- If a situation reaches the point where further protest may be costly, consider whether the stakes are sufficiently high
- For example, if the issue involves only financial risks for the employer, then, if managers are acting unreasonably, it is probably not worth risking your career
Use organizational dispute resolution mechanisms

- Good organizations have procedures, not always formal, for resolving disputes
  - After having exhausted informal efforts to persuade your manager, then you must consider using these mechanisms
- Since this will almost certainly damage relations with your manager, this step should be taken only after a careful review along the lines discussed in guidelines 1 and 2
- If you have an ally higher up in the management chain, you might appeal to that person for advice and possibly to intervene as a mediator

Keep records and collect paper

- As soon as you realize that you are getting into a situation that may become serious, you should initiate a log, recording, with times and dates, the various steps that you take (e.g., conversations, email messages, etc.)
- Keep copies of pertinent documents or computer files at home, or in the office of a trusted friend--to guard against the possibility of a sudden discharge and sealing off of your office
- But be careful not to violate any laws!
Resigning

• If efforts to resolve the conflict within your organization fail, then a decision must be made as to whether to go further
• It should be realized that there will almost certainly be a significant personal cost involved if you proceed
• It is very unlikely that you would be able to remain with the organization, unless your job is governmental in nature, protected by civil service regulations or the like

Resigning (continued)

• One obvious choice is to resign
• The advantages are:
  – This adds credibility to your position--makes it obvious you are a serious person
  – Arguments that you are being disloyal to your employer are disarmed
  – Since you are likely to be fired, resigning may look better on your record
Resigning (continued)

• One obvious choice is to resign
• The drawbacks are:
  – Once you are gone, it may be easier for the organization to ignore the issues you raised, as others in the organization may be unwilling to carry on the fight
  – The right to dissent from within the organization may be one of the points you wish to make
  – You might thereby lose pension rights, unemployment compensation, and the right to sue for improper discharge

Anonymity

• In some situations, engineers may see serious harm being done within their organizations, but recognize that publicly calling attention to it may cause personal repercussions beyond what they are willing to accept
• It might be possible to report the problem anonymously to others, e.g. a regulatory agency, a senator, or a reporter
• One problem is that an anonymous report may not be taken seriously
Anonymity (continued)

• Providing enough information to make the report more credible may make it easy for the organization to identify its source
• Being exposed as a purveyor of an anonymous report may be more damaging to the engineer than the effect of openly making the report
• A reporter might distort the facts -- more “newsworthy”
• One should be particularly careful not to malign any individuals and one should convey in the message means for verifying the claims made

Outside Resources

• If, after the failure of internal conflict resolution measures, you decide to take the matter outside the organization, whether or not you decide to resign, care must be taken in choosing where to go
• In many cases, an obvious place is a cognizant regulatory or law enforcement agency
• Other possibilities include state or local government officials or legislators, or public interest organizations
Outside Resources (continued)

- Although it is usually not a good idea to take one's case directly to the news media, they generally become involved eventually, usually in reporting actions taken by whatever entity the engineer has contacted
  - One must take special pains to be accurate and clear when dealing with journalists so as to minimize sensationalism and distortion
  - When given a choice among media organizations, choose those with reputations for fairness and accuracy