CHAI)TER4 • Engineers in Organizations organization, but the whistleblower may still regard this as an action oflast resort that is undertaken for the long-term benefit ofthc organization as for the public good.

Third, when making criticisms and suggestions, employees should fix-us On issues rather than personalities. This helps avoid excessive emotionalism and personality clashes. Fourth, written records should be kept Of suggestions and especially of complaints. This is important if court proceedings are

eventually involved. It also serves to the record straight" about what was said and when it was said.

Fifth, complaints should be kept as confidential as possible for the protection of both the individuals involved and the firm. Sixth, provisions should be made for neutral participants from outside the organi When the dispute requires it. Sometimes, employees within the organization are too emotionally involved in the dispute or have too many personal tics to make a dispassionate evaluation Of the issues. Seventh, explicit provision for protection from retaliation should be made, with mechanisms for complaint Wan employee believes he or she has experienced retaliation. Next to the fear of immediate dismissal, probably the greatest of an employee who is in disagreement with a superior, is that he or she will suffer discrime ination in promotion and job assignment, even long after the controversy is resolved. Protection from this fear is one Of the most important Of employee rights, although it is one of the most difficult to provide. Eighth, the process for handling organizational disobedience should proceed as quickly as possible. Delaying resolution of such issues can be a method of punishing dissent, Sufficient delay Oticn allows management to perform the actions against which the protest was made. Prolonging the suspense and cloud Of suspicion that accompanies an investigative process also serves to punish a protesting employee, even if his or her actions were completely justifiable. As we have said, these are recommendations. Organizations that take them serie ously provide a more supportive environment for engineers than those that do not. The extent to which any given organization does so, Of course, remains to be seen. 4.4 PROPER ENGINEERING AND MANAGEMENT DECISIONS Functions of Engineers and Managers How should we understand the boundary between decisions that should be made by engineers and those that should be made by manager-O An answer to this question must begin with a delineation of the proper finctions of engineers and managers in an organization and Of the contrasting points Of view associated with differing functions. The primary function of engineers within an organization is to use rhcir technical knowledge and training to create structures, products, and processes that are ofvalue to the organization and its customers. But engineers are also professionals, and they must endeavor to uphold the standards that their profession has decided should guide the use Of their technical knowledge- Thus, engineers have a dual loyalty-to the organization and to their .profession. Their professional loyalties go beyond their immediate employer. 13 Sce Box 4-3