## Where the Green Grass Grows

**(Case 1)**

The mission of the National Institute for Engineering Ethics (NIEE) is to promote ethics in engineering practice and education. One component of NIEE is the Applied Ethics in Professional Practice (AEPP) program, providing free engineering ethics cases for educational purposes. The following case may be reprinted if it is provided free of charge to the engineer or student. Written permission is required if the case is reprinted for resale. For more cases and other NIEE Products & Services, contact the National Institute for Engineering Ethics, Texas Tech University, [www.niee.org](http://www.niee.org).. (All reprints must contain these statements)

**The Case:**

Ralph Horn was an engineer working for the Gamma Group, a national specialized engineering firm with headquarters in Boston and branch offices in Winston-Salem, New Orleans, Chicago, Salt Lake City, Boise and Seattle. He had started working for the firm in their Chicago office immediately after receiving his MS degree in engineering from a noted midwestern university in 1982. His wife, Karla, also started her career in financial computing systems about the same time. Ralph was a diligent worker, and handled most of the projects to which he was assigned efficiently, producing technically excellent reports and designs. As a result, by 1991 he advanced to a project manager position in the firm and was considered to be one of the office’s most valuable employees by the firm’s president, Dirk Wheeler.

In 1994, Ralph’s wife, Karla, decided that her career had stagnated and after searching around, found a much more attractive position paying almost twice her present salary in Omaha, Nebraska. She accepted the position and Ralph was forced to make a career move himself if he planned to preserve their marriage. Since his firm did not have an office near Omaha, he approached his manager and together they made a proposal to the firm’s president, Dirk Wheeler, to open a small branch office in Omaha under Ralph’s management. The proposal was accepted and the Omaha branch was set up. By 1996 that office had 18 employees, including 10 engineers, two CADD operators, three technicians, a secretary/receptionist, a bookkeeper and Ralph, who was the principal engineer and branch manager.

The business was reasonably profitable and Ralph had attracted several substantial clients. In addition, the work forecast for the future, estimated to be on the order of $1.3 million, looked most promising. At that point Ralph was approached by Dirk Wheeler, who had been suddenly fired by the Gamma Group in 1995 for attempting to sell the entire company to an entrepreneurial conglomerate without the consent of the stockholders.

Wheeler had subsequently become involved with Compass Associates, a general engineering company with several offices in the mid-section of the country, but not in Omaha. Compass was interested in having an office in Omaha capable of providing the same type of specialized engineering services as Ralph’s Gamma Group office. Dirk Wheeler was interested in the same goal so that he could secure a position with Compass, and offered to make an arrangement with Ralph to open a wholly owned subsidiary of Compass in Omaha with Ralph as the manager and Wheeler as the subsidiary’s president.

While Ralph was not sure that he wanted to be involved in such an arrangement, Karla pointed out that the salary and potential bonuses with Compass would be far greater than what he was receiving from the Gamma Group, there would be less stress on him about acquiring new business since Wheeler was a born salesman, and Wheeler had provided the opportunity for them to move to Omaha in the first place......obviously he liked Ralph and would look out for him. Just to make sure, Karla agreed with Dirk Wheeler that Ralph should work part-time for Compass for two or three months to get things set up before leaving the Gamma Group.

As a result, about three months later Ralph announced to the personnel in the Gamma Group’s Omaha branch office at 3:00 p.m. on a Friday that it was his last day there, and wished them well, telling them that he was transferring to Compass Associates to do the same kind of specialized engineering work for them. At the same time, Dorph Klingstad, one of the more senior engineers in the same Gamma Group Omaha office, announced that he also was leaving to go to work for Compass with Ralph, and they expected to be working on projects for the same clients as they presently served.

Needless to say, not much more work was accomplished that day as Ralph and Dorph cleaned out their offices and departed, and the rest of the staff spent their time in small groups discussing this sudden turn of events and what was to become of each of them. One of the engineers called Gamma’s main office in Boston to see who was going to replace Ralph, and was told that it was the first they had heard of Ralph and Dorph leaving. As a result, there were no specific plans at the moment, and it would be several days or more until Gamma’s management could unravel the events and plan for the future of the Omaha office.

Over the weekend, Ralph’s wife, Karla, spent a substantial amount of time on the telephone talking to most of Gamma’s Omaha office employees, telling them that since Ralph and Dorph had now left, there would be no one to bring in new business, and the existing clients would most certainly follow Ralph to the new Compass Associates office. She also extolled the virtues of Compass Associates, including what a good place it would be to work, and suggested pointedly that if they were interested in maintaining their income, they should commit to transferring to Compass Associates as well.

By the end of the following week, everyone in the old Gamma Group Omaha office except the secretary, one of the technicians and one of the CADD operators had resigned and gone immediately to work for Ralph and Dirk in the new Compass Associates office a block down the street.

If you had been one of the engineers in the Gamma Group Omaha office who was approached by Karla about transferring to Compass Associates, what would you have done?

**The Peter/Paul Dilemma**

**(Case 2)**

The mission of the National Institute for Engineering Ethics (NIEE) is to promote ethics in engineering practice and education. One component of NIEE is the Applied Ethics in Professional Practice (AEPP) program, providing free engineering ethics cases for educational purposes. The following case may be reprinted if it is provided free of charge to the engineer or student. Written permission is required if the case is reprinted for resale. For more cases and other NIEE Products & Services, contact the National Institute for Engineering Ethics, Texas Tech University, [www.niee.org](http://www.niee.org).. (All reprints must contain these statements)

**The Case:**

You are an engineer for a well-respected consulting firm. The firm has been very successful in the past, but recently business has slowed down due to a slump in the local and regional economy.

One of the projects being handled by the internal design group with which you work is for Excaliber Resorts, Inc., a reputable company which deals with the development of expensive, world class destination resort properties, including all of the roadway design, drainage and site civil work. The estimated construction cost of the project your group is currently working on is in excess of $90 million, and this is only the first of several proposed phases. The project is going well. In fact, the work for this initial phase of the overall development is ahead of schedule and well within the budget.

Since the engineering work on the Excaliber project is slowing down, you and part of your group are assigned another project to work on at the same time. Unfortunately this new project for Wellfleet Corporation has been hanging around the office for several months, since the project manager went on vacation alone to Fiji, then was sued for divorce by his wife immediately after returning.

As a result, a lot of time has been charged to the job and billed to the client, but very little has been accomplished. While the deadline for the Wellfleet project is still well into the future, it is estimated that at least 50% more money is needed to complete the design properly than actually remains in the contract budget. Neither the Excaliber nor the Wellfleet project has a lump sum contract. Each is being billed using standard hourly multiplier rates.

You and the other members of your design group are told by the Vice President for Operations of your firm that since you are officially working on both projects, the majority of your time should be spent on the Wellfleet project, but your time should be charged to the Excaliber project, since there is more than enough left in that budget to finish the job. The Vice President also indicates that s/he will take the responsibility for these decisions.

What do you do?

**Between a Rock and a Hard Place:**

**Will the Real Culprits Please Step Forward?**

**(Case 3)**

The mission of the National Institute for Engineering Ethics (NIEE) is to promote ethics in engineering practice and education. One component of NIEE is the Applied Ethics in Professional Practice (AEPP) program, providing free engineering ethics cases for educational purposes. The following case may be reprinted if it is provided free of charge to the engineer or student. Written permission is required if the case is reprinted for resale. For more cases and other NIEE Products & Services, contact the National Institute for Engineering Ethics, Texas Tech University, [www.niee.org](http://www.niee.org).. (All reprints must contain these statements)

**The Case:**

As a new faculty member at a noted university you are teaching a graduate level engineering course. The course requires that a term project, including a written report, be worked out in the department's computer laboratory. Much to your dismay, you discover that more than half of the students (7 out of 12) in the course have turned in identical project reports. The font styles are different, but the wording and punctuation are identical, including numerous spelling and grammatical errors.

The project was comprehensive and constitutes a significant portion of the final grade for the course. Grade reports are due tomorrow. Your boss, the chair of the department, has already left town and cannot be reached. His parting words to you were to grade the new graduate students generously, since they depend on good grades for scholarships, assistantships and student visas. Furthermore, you have heard him say that the department needs to keep its numbers up to get laboratory space and faculty salaries (including yours) from the university, and the graduate program is vital to this end.

What do you do?

**WAS THAT “PIRACY” OR “PRIVACY”?**

**(Case 4)**

The mission of the National Institute for Engineering Ethics (NIEE) is to promote ethics in engineering practice and education. One component of NIEE is the Applied Ethics in Professional Practice (AEPP) program, providing free engineering ethics cases for educational purposes. The following case may be reprinted if it is provided free of charge to the engineer or student. Written permission is required if the case is reprinted for resale. For more cases and other NIEE Products & Services, contact the National Institute for Engineering Ethics, Texas Tech University, [www.niee.org](http://www.niee.org).. (All reprints must contain these statements)

**The Case:**

Lawrence, the managing principal of NorthLink Consultants, is pleased at his firms’ new information technology (IT) capabilities. Knowing that effective use of IT offers a strategic competitive advantage in the marketplace, Lawrence observes an increase in cooperation on projects and the office is using much less paper for memos and policy directives. The company web site is growing as staff, engineers and clients contribute to the site.

Lawrence, however, worries that several employees are spending an excessive amount of time on email. He suspects that much of this email activity is directed at family and friends on the Internet and outside the firm. He had reminded the employees of NorthLink’s policy which states that email is for company business and emails are considered part of the firm’s property.

Still, Lawrence feels that there is way too much time when employees are emailing in inappropriate ways. He approaches his systems engineer, Gwen, with a question. Since all the computers are connected on the computer network, could she access the employees’ email files on their PCs? Gwen replies that such an examination of the files on the PC workstations is possible. Her own feelings, however, are that such an attempt to "reach out and touch" the users’ PCs would be a breach of trust. In fact, some employees might be so offended with this intrusion of privacy that they would leave the firm.

Lawrence responds that company policy clearly informs employees that the email files are the property of the firm. They should understand that it is part of his supervisory responsibility to see that they use the email properly. Gwen argues that employees might well use the email to talk about issues that they do not want management to see. These may be legitimate company issues, but are not meant to be shared with the management. Adamant in his resolve, Lawrence states (as he walks out of Gwen’s office) that, by tomorrow evening, he expects to be able to access all of the email files on each of the PCs.

Gwen is very disturbed. This policy will open up communications she feels should be regarded as private except when some formal legal decision requires them to be opened. However, since it is her job she knows she cannot refuse to perform a technical change in the system, and she feels she must allow Lawrence access by tomorrow evening.

What would you do in Gwen’s situation?