

Case 1: Computer Encryption Software



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Variation I

- People of Interest:
 - Greg
 - Greg's boss
 - “Individual in California”

Variation I: Narrative

- Greg is recruited fresh out of college.
- Greg's boss has him write a piece of encryption software for e-mailed documents.
 - These documents would be used internally and the software distributed to different departments within the company.



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Variation I: Narrative (cont.)

- Greg hears on news that someone from California has made *similar* software and has made it available overseas and is currently under prosecution in federal court.
 - “Open source software with encryption remains subject to U.S. export control laws and regulations.” [1]
- Greg discovers that it's his software and informs his boss.
- Boss shrugs it off and essentially tells Greg not to worry about it.
- The Boss is going against IEEE Code of Ethics 1, 2 and 10.
- Also , NSPE codes 5 and 6 of fundamental canons, 5 of rules of practice, and 1,2, and 7 of the professional obligations.

Variation I: Narrative (cont.)

- Greg lets it go and later learns that the Middle Eastern office of his company has been supplying the software outside of the company to contractors so that they could exchange secure e-mailed documents.

Variation I: Questions

- Greg's ethical responsibilities...
 - as a designer?
 - to himself?
 - as a citizen of the United States?
- Ranking of responsibilities
 - [1]: Himself
 - [2]: Citizen of the US
 - [3]: Designer
- Greg should follow NSPE Professional Obligations 7, 8 and 9 in this instance.

Variation I: Questions (cont.)

- Satisfying as much as we can...
 - First notify his company of the liability and how it should be fixed. He needs to make sure that this is documented to protect himself.
 - If this doesn't fix it then he should then give the entire encryption code to the government and report about his companies wrongdoings.
 - “The notification or copy should be sent to crypt@bis.doc.gov and to enc@nsa.gov.” [1]

Variation II

- People of Interest:
 - Greg
 - Greg's boss
 - Greg's bosses overseas
 - "Individual in California"



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Variation II: Narrative

- Greg recruited fresh out of college... asked to develop email encryption software by his boss.
- Greg's boss is pleased with Greg's work and tells friends and managers.
- Greg's bosses overseas want to “borrow” Greg's time in order to customize the software overseas at locations including Saudi Arabia, Singapore, and Thailand.

Variation II: Narrative (cont.)

- Greg's boss says okay and recommended that Greg perform software coding for other divisions.
- Greg sees local news about someone from California who made similar software available overseas... currently under prosecution for distribution of encryption algorithms overseas.

Variation II: Narrative (cont.)

- Greg tells boss...
 - Greg's Boss - "Oh, don't worry about those muckraking reporters; always trying to dig up dirt. By the way, did I mention that on your way to Thailand I planned for you to have a weekend layover at a nearby resort?"
- This statement goes against IEEE Code of Ethics point 1, 2, 4, and 10.

Variation II: Questions

- What is a bribe?
 - “Bribery is defined as giving someone a financial or other incentive to encourage them to perform their functions/activities improperly, or to reward them for having already done so.” [2]
- Is Greg’s boss offering him a bribe?
 - Yes, he’s offering an incentive to sway Greg’s moral judgement. This goes against the 4th point of the IEEE code of Ethics.
 - The boss goes against NSPE Fundamental Canons 1 and 5.

Variation II: Questions

- Greg's ethical responsibilities...
 - as a designer?
 - to himself?
 - as a citizen of the United States?
- Ranking of responsibilities
 - [1]: Himself
 - [2]: Designer
 - [3]: Citizen of the US
- Greg should follow NSPE Professional Obligations 5 and 6

Variation II: Questions (cont.)

- Satisfying as much as we can...
 - First, Greg should refuse the incentive, since it constitutes a bribe.
 - Second, Greg should inform his boss that he is not comfortable with doing this job, since it lies within a gray area of legality.
 - Third, if his boss pressures him into doing this, then Greg should go to upper management.

Class Discussion!!!

- Can a promotion or a perk be a bribe?



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Sources

- <https://www.eff.org/deeplinks/2019/08/us-export-controls-and-published-encryption-source-code-explained>
- <https://www.michaelpage.co.uk/advice/management-advice/legal-updates/bribery-act-and-how-it-affects-you-employer>