Homework #1: Ethics

Assignment Details

This homework is due by Friday, Feburary 5th at 12:59 AM ET (before class). Remember there are no late submissions for the homework so please complete it by then.

Please add the following header to your assignment:

Name: {Firstname Lastname}

UID: {Your UID}

Honor Pledge: *I pledge on my honor that I have not given or received any unauthorized assistance on this assignment/examination*.

Assignment Goal: To make an ethical argument applied to the given security scenario, addressing the 3 following questions.

Assignment Questions

Consider the following scenario: You are a software engineer at an aircraft manufacturer working on aircraft software and firmware.

As part of a regular security audit, **several high impact vulnerabilities** are discovered in flight control software that can be remotely exploited potentially causing autopilot, navigation, and engine failure. Fixing these bugs would require a large rewrite of the codebase requiring a large team of developers and millions of dollars.

1. Who do you alert of the problem, and in what order?

   - Your boss? The public? Consumer watchdogs/safety regulators like the FAA, US-CERT? no one?

2. If your boss pushes to keep it quiet, what would you do?

   - Would you raise concerns with management further up the chain? Alert federal regulators or watch dogs?

3. If nothing is done and it results in the vulnerability being exploited in the wild, who would be responsible?

   - The company? Your boss? You?

Scoring

The assignment is worth **75 points**

- **25 points for each question**

  - **25/25**: well-reasoned argument, follows general outline from lecture

  - **20/25**: minor logic error in response, argument is still easy to follow

  - **15/25**: serious logical error in response, argument is hard to follow

  - **0/25**: did not answer question