

A Matter of Integrity

Randy tossed in a fitful sleep, no, in a fitful attempt to sleep. He knew the design flaw was there. Try as he might to tell himself it was not his problem, it persisted. Cathy snored softly beside him. *Damn, I wished I could share her tranquil life. How long can I hide this from her?*

As the first sign of daylight filtered through the shades, he got up and tiptoed into the bathroom. Shower and shaving didn't rouse her. But careless when he closed the bathroom door, a loud click did. She raised on one elbow and peered at the clock.

"Randy, what are you doing?"

"Couldn't sleep longer. I'm going to work early."

"Do you want me to fix you breakfast?"

"No, I'll do it. Go back to sleep." He pulled the cover over her shoulder and kissed her cheek.

"Thanks. Tell me when you're leaving."

"Okay."

Breakfast this morning was peanut butter on toast, a banana and glass of milk. He wasn't hungry but knew she would check what he ate. She tracked everything he did. How long could he keep the secret?

* * *

He worked for over an hour before his supervisor arrived.

"Randy, hard at it already?"

"Wanted quiet to code a complex routine before everyone showed up. When you have a moment, can I talk to you?"

"Give me ten minutes to get settled."

Randy's eyes darted nervously when he entered the office. He avoided eye contact.

"Something the matter, Randy?"

"Yes sir. I need your advice, Mr. Thompson."

"What about?"

"I looked at the flight control system design and believe there's a failure mode that could be dangerous."

"That's hard to believe with a triplex system—three independent channels."

"The problem is that the B and C channels use the same hydraulic power."

"So, if that hydraulic system fails, the A channel takes over."

"But what if the A channel has some latent failure which is hidden because B and C override it? The situation would go undetected for months or years until the hydraulic system fails. Then there might be a catastrophic accident."

"Randy, more knowledgeable minds than ours have studied this design. Our job is to develop software for the flight control computer."

"But what if—"

"Let's leave it to them."

His tone closed the conversation. Randy's shoulders slumped slightly as he trudged back to his desk. He could not sweep the problem under the corporate rug although he had to admit there were many engineers in their company involved in the fighter design. *Surely someone else has seen this problem if it exists. Perhaps I'm missing something.*

He spent the morning trying to focus on his work, without success. It seemed obvious that pilots could die in this fighter. Perhaps not for months or years but sooner or later the combination of events would occur.

Mid-afternoon he left his cubicle and walked to the systems engineering group. Maybe Joe Saxon could put his mind to rest. When he described the problem, Joe's response shocked him.

"Leave it alone, Randy. We had three hydraulic systems in the initial design. The big bosses deleted the third system as a weight and cost cutting measure. They've convinced the Air Force it's not needed."

"But don't you agree the latent failure mode exists?"

"I'm told it doesn't. Tell yourself the probability is so remote it will never happen."

Randy left angry. How can he take that position? He must understand the problem. Is he simply afraid to speak up?

For two days he fretted. Not his problem from an organizational aspect, definitely his problem from a moral viewpoint. It undermined his productivity and interrupted his sleep. He had to marshal his courage and take the question to a higher

level. Without his supervisor's knowledge, he made an appointment with the Flight Control Chief Engineer, Jake Jackson.

"Mr. Jackson, my name is Randy Bezler. I work in the flight control software group."

"What can I do for you, Randy?"

As Randy went through his description of the failure mode, Jake's face darkened. He interrupted Randy before he could finish.

"You said you're a software, not system engineer. My advice to you is to stick to programming and leave the rest to our experts."

"I tried bringing it to—"

"Did you hear what I just said?"

As he left, Randy didn't know if he shook from the tension of confronting Jackson or the anguish of rejection. Five minutes after he reached his desk, Stan called him into his office.

"I just got raked over the coals by Jackson. What the hell made you take your damn problem to him? I told you it's none of your business. Now, either you let it go or I let you go. Understand? Now get out of here."

Randy trembled in his cubicle. His hands shook on the keyboard. *I probably just lost any chance of a merit raise. Perhaps my job is in jeopardy when the inevitable layoffs come.* They had a big mortgage and precious little savings. No paycheck would devastate them. Cathy would be irate if she knew his meddling put them at risk. His concern proved prophetic. Two days later, Cathy confronted him during dinner.

"What's going on, dear? Something bothers you. You're not sleeping well. Is your job secure? What is it?"

"There's still more work than the group can handle."

Can I tell her about the problem? Will she understand or just think I'm a damn fool? Can I hide it from her? Probably not. He decided to confess.

"I've discovered a latent failure mode in our flight control system which could eventually kill pilots."

"That should make you a hero."

"Turns out it makes me a pariah with the people who designed it. The company wants to sweep it under the carpet."

"So what are you doing?"

"I raised it to management and got told to forget it and stick to my job."

"Are you?"

"What?"

"Forgetting it."

"I can't. I know it's wrong for them to wish it away."

"But if you persist, don't you put your job at risk?"

Nothing gets by her. "Perhaps."

"If you lose this job, we'll be in serious trouble. Remember, I'm pregnant."

"I know. I'm trying to let it go."

"Then try harder!"

* * *

Days passed. Randy concentrated on his program. But the problem gnawed at him. Over two evenings, he researched component reliabilities on the internet. They wouldn't be directly applicable, however, they would give him a ballpark assessment. He hoped they would prove he worried needlessly. Unfortunately, the numbers did nothing to ease his conscience. If anything, they predicted the event would occur sooner and more often than he anticipated.

For two weeks he fought with himself. Do I ignore it and keep my job or risk everything to save lives? He tried to push it from his mind. The decision must have been made at Harold Wiggins' level. Surely he had all the facts and knew what he was doing. *Who am I to question the Chief Project Manager?* But the problem wouldn't go away. When he could stand it no longer, he made an appointment with the onsite Air Force representative.

"Major MacKenzie, it's not in my job description and I shouldn't be here but there's a situation I feel compelled to bring to your attention. If my management learns that I've come to you, they will fire me."

"If I hear something for which the source can't be kept confidential, I will stop you."

He listened without comment to the whole story. Then asked some questions.

"Have you assessed the probability of this multiple failure?"

"I don't have specific data to work with, however, I have done an analysis using representative data which bears out the concern."

"Have you raised it with your management?"

"Yes sir. They told me it's not a problem and certainly not my problem."

“Obviously you still think it is. What made them drop the third hydraulic system?”

“Cost and weight.”

“Thank you. I’ll take this up with our people. Best you keep a low profile on it from now on.”

When Randy left his office, he started to shake. His legs wobbled. Will they keep my involvement secret? *My job is in their hands. What will Cathy say if I’m fired over it? At least now the flaw is not my problem. If the Air Force decides to do nothing, that’s their responsibility.*

* * *

His conscience clear, he slept better, though now bothered by the threat of discovery. He buried himself in his work. A week and a half passed. Then on Wednesday morning, Stan dropped by his desk.

“Come with me,” was all he said.

Afraid to ask what it was all about, Randy followed him in silence. His heart pounded when he realized they were headed to mahogany row. A security guard sat in the lobby. They entered Harold Wiggins’ office and Stan closed the door. Jackson sat in the corner.

Wiggins began, “The Air Force has called for a hearing on our flight control system design. They are specifically concerned with the possible latent failure mode you told Jake about.”

“I—”

“Shut up! We have no place here for trouble-makers who undermine our company. You’re fired.”

He pressed the intercom button on his desk. “Mabel, is Security here?”

“Yes, Mr. Wiggins.”

Wiggins dismissed them with a sweep of his hand, reached for a paper in his inbox and started to read.

Randy trusted that the Air Force had not fingered him. With the courage of a mouse cornered by a cat, he spoke up. “Mr. Wiggins, I simply brought that problem to the attention of Mr. Jackson.”

Wiggins turned a deaf ear, just kept reading as if they didn’t exist. Stan said, “Come on, Bezler.”

Outside, the security guard grasped Randy’s arm and reached over to remove his badge. As he escorted him through the building, Randy felt every employee’s eyes on him. He trembled and could not stop a tear that trickled down his cheek. At the gate, the guard lifted a box from the guardhouse. It contained Randy’s coat and personal things.

He wanted the drive home to take forever. It passed in a flash. *How could I do this to Cathy? What do we do now? How can I get another job after being fired?* His chest felt constricted, breath came in gasps.

When Cathy learned what happened, she flew into a rage and shouted at him.

"You couldn't leave well enough alone, could you? Had to be a damn hero for some pilot probably not even born yet."

His voice rose too. "Can't you see? It's a matter of integrity! Sometimes that means sacrifice."

"Sacrifice! You're an idealist. You think some magic will appear and justify your damned integrity. I'm a realist. All I see is you got yourself fired and won't find another job as a result."

Quieter, "I'll get a job."

"If you don't get a job in a couple of months we're doomed. Probably lose the house. I may have to crawl back to my parents before the baby is born."

"I'll find a way to avoid us having to move in with your parents."

"I said I, not we." The threat hung in the air as she turned away.

They didn't speak for the rest of the day. He didn't want to eat. No dinner was offered. She sobbed silently in bed when he turned in. When he tried to talk to her, she turned her back to him and covered her head. He lay there, stared at the dark ceiling through tears. *What will happen? What have I done?*

After what seemed like hours, from under the covers came a tremulous, "Randy?"

"Yes?"

"I'm scared."

"I am too."

Long minutes passed. She turned and whispered with a quaver.

"I don't want our marriage to end. It just feels like our world blew up."

He pulled her to him. They clung to each other as though their lives hung in the balance. Both trembled. Most of the night spent sleepless, the future looked hopeless.

In the morning, she fixed breakfast.

"I'm not hungry. God, I wish I had kept quiet."

"Me too, but it's done now. You can't job hunt on an empty stomach."

At nine fifteen, he called the company operator and asked to be connected to Major MacKenzie.

“Major, this is Randy Bezler. Do you remember me?”

“Yes, Randy. I’m surprised you called. The matter we discussed is now in the hands of our people.”

“I know. A review is scheduled. They fired me yesterday.”

After a pregnant pause, “Your name never passed my lips.”

“I believe you. They just assumed I told you. Never gave me a chance to say anything.”

“Randy, this now comes under the whistle-blowers’ protection act. I’ll bring it to the proper people’s attention.”

* * *

The general and his entourage entered the conference room and sat down across from Wiggins, Jackson and a group of underlings. The company president sat off on the side, silent.

The general began, “Harold, my people have analyzed your flight control design and they now believe it is compromised by a dual hydraulic system.”

“General, we have studied the system reliability in great detail and I assure you it is completely safe.”

“Your company has developed a number of fine fighters, Harold. That led us to trust your design team. In fact, we trusted you personally when you proposed removal of one hydraulic system. However, my people have concluded two hydraulic failures cannot be ruled out.”

“Both failing on the same flight is extremely remote.”

“We don’t see it that way. Perhaps in peacetime but it reduces survivability under fire. And we’ve discovered that a latent failure in the third channel could go undetected for years only to cause a catastrophe after a single hydraulic failure. You led us down the garden path to save money.”

“We don’t believe that—”

The general stood up. “Harold, stop bull-shitting me. The Air Force will not accept delivery of a single fighter without a triplex hydraulic system. Is that clear enough?”

The company president spoke up for the first time. “We understand, General.”

The blood drained from Wiggins' face. His hands shook. Millions of dollars would be spent in redesign, rework and delays.

"One more thing, Harold. It was brought to my attention that you ignored the warning of one of your engineers and actually fired the man. Under the whistle-blowers' protection act, he has the option of returning to work with full back pay or damage compensation. We will recommend two million dollars to the adjudicator. If you choose to dispute this, the Air Force will supply whatever legal aid he needs."

"General, the man fail—"

As so often happens, the company president had the last word.

"Shut up Wiggins!"