

The Hughes Whistleblowing Case

Adapted from:

http://computingcases.org/case_materials/hughes/case_history/hughes_case_history.html

Overview

In the mid 1980s, Hughes Microelectronics was manufacturing what were called hybrid microchips for use in guidance systems and other military programs. A series of environmental tests were specified by the government contract. But pressure to ship chips out on time to customers got in the way of complete testing. "Hot" chips, those needed right away for shipment were given preferential treatment by some in charge of the testing process and shipped without the proper tests being performed.

When computer chips are embedded in expensive weapons systems, the chips need to be tested to make sure they can withstand years of exposure to the extreme environmental hazards they might face (rapid changes in temperature, severe shock, changes in atmospheric pressure, etc.). These chips are sealed in containers to protect them from the environmental stress. The seals and the chips need to be tested to make sure they can withstand the stress. Unfortunately, the need to manufacture and deliver these chips on time can compete with the desire to test them thoroughly.

This case is about what happened when employees of Hughes Microelectronics noticed that these tests were being skipped. The decisions they made to report this makes this one of the classic cases in the history of whistleblowing.

Background

Most of the chips that Hughes Microelectronics was making were of a special sort called "hybrids." Hybrid chips combine two different kinds of semiconductor devices on a common substrate. These hybrid chips are then hermetically sealed in metal or ceramic packages so they are protected from environmental stress and isolated in an inert atmosphere of helium and nitrogen. There were over 70 programs for which Hughes Microelectronics was manufacturing hybrid chips from 1985 to 1987. The chip for each program was different. Because of military secrecy as well as company secrecy, exact specifications of the chips are unavailable. But we provide an example of the sort of chip that was likely among the Hughes chips, an analog to digital converter.

The chips had to be tested not only for whether or not they worked correctly, but for whether or not they held up to standards in terms of their seal or their resistance to heat and shock. The records that Hughes kept regarding their testing showed that approximately 10% of the chips tested failed one or more tests. When a test fails, it does not mean the chip is bad. It might work fine, in fact. But if the seal is broken, water or air might get in over time and corrode the connections on the chip. The tests included things like various programs of temperature cycling, shock tests, and leakage tests.

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The next section provides short summaries of five incidents in which Margaret Goodearl and Ruth Ibarra witnessed attempts to to bypass the appropriate tests. More detail is provided for some of the incidents (linked to the incident title).

The Various Incidents

Margaret Goodearl and Ruth Ibarra are the two whistleblowers in our case. Goodearl was in charge (along with Donald LaRue) of the floor area in which the testing was done. Ibarra was a quality control agent hired by the company to provide an additional audit of the accuracy and completeness of the tests.

The Lisa Lightner Incident

Lisa Lightner was an operator in environmental testing who conducted leak tests. In August of 1986, Donald LaRue ordered Lightner to pass a hybrid that she had tested to be a "leaker." Lightner, along with Goodearl, reported the incident to upper management. Goodearl was later threatened with loss of her job if she did not reveal "who the squealer was."

The Shirley Reddick Incident

Shirley Reddick was a worker in charge of sealing the lids onto the hybrid packages as well as the stabilization bake process. In October of 1986, Reddick had been ordered by Donald LaRue (a floor manager) to reseal some hybrids. A hybrid is not allowed to be resealed unless it has gone through a complicated and lengthy process, and a "decap" sticker had been placed on it. Reddick complained to Goodearl, who complained to upper management and she was again threatened with loss of her job.

The Rachael Janesch Incident

In the same month (October 1986), LaRue asked Rachel Janesch, another tester in the environmental area, to sign off a leaker as passing the leak test. Goodearl became involved in the reporting of this incident, and the parts were re-tested.

The PLRS Incident

Goodearl and Ibarra found a tote box of PLRS (Position Locating Reporting System) hybrids. PLRS most likely involved some sort of radar function. There was some blank paperwork on the lot travelers accompanying the PLRS parts, meaning that tests had not been run on them before they were passed on. After she reported this incident, Goodearl was told that she was not a part

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of the team anymore, that LaRue did not trust her, and that her relationship with LaRue was like a divorce in that she was the one that was going to have to go.

Goodearl attempted to file harassment charges in Personnel following the incident. Goodearl was summoned into the office of a middle manager who had been given the harassment documentation by Personnel. He tore up the harassment charge in front of her, flung his glasses at her, and told her that he was going to fire her if she ever went above him to complain again. After this incident, LaRue was removed from his job and taken out of E-1000 in order to avoid further conflict. But his work still involved supervision of testing chips.

The AMRAAM Incident

Two hybrids destined for an air-to-air missile failed the leak test. LaRue placed these chips on his desk with the intention to pass them on without the test during the evening when Goodearl was not there. By this time, Goodearl and Ibarra were already talking with members of the Office of the Inspector General and were looking for evidence to prove that Hughes Aircraft was intentionally skipping tests. Goodearl and Ibarra photocopied the documentation from the chips showing that they had failed the leak test. They then replaced the chips and their documentation on the desk where LaRue has left them. A few days later they were shipped to a subsidiary of Hughes. They were intercepted by the Department of Defense. The two parts were subsequently tested and were revealed to be leakers.

The decision to blow the whistle

After Goodearl began to report the incident internally to upper management, Goodearl's performance reviews took a sharp drop. Her earlier reviews had been excellent and she had been promoted to her current position because of them. The feedback she was getting from upper management was clear, she had to shut up and get with the team, or lose her job.

Just before the AMRAAM incident, Goodearl and Ibarra, knowing that the series of incidents was likely to continue, placed a telephone call to the Fraud Hotline of the Office of the Inspector General. After several telephone conversations and face to face meetings, they agreed to begin to look for clear evidence of fraud. After the AMRAAM incident, Goodearl was laid off. Ruth Ibarra was transferred to another position that involved loss of most of her responsibility. She later left Hughes.

Court Battles

The Inspector General's office began an investigation in 1989, as soon as they received the clear evidence from the AMRAAM incident.

After Goodearl was laid off by Hughes in 1989, she filed a Wrongful Discharge suit against them. In 1990, Goodearl dropped this suit in favor of what is called a *qui tam* lawsuit in cooperation with Ruth Ibarra (now married with the last name Aldred). The two whistleblowers claimed in

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their suit that Hughes was defrauding the Government in its microcircuit testing procedures. Specifically, the civil suit charged Hughes with "knowingly presenting, or causing to be presented, false or fraudulent claims against the United States, or knowingly making, using, or causing to be made or used, a false record or statement to get a false or fraudulent claim allowed or paid by the Government, and for conspiring to defraud the Government by getting a false or fraudulent claim allowed or paid, in violation of the False Claims Act, 31 U.S.C. §§ 3729-32."

The False Claims Act has been around since 1983, and was designed to allow a citizen to sue a U.S. government contractor for making false or fraudulent claims about the quality of the goods or services the contractor has agreed to provide. It allows the citizen to sue "on behalf of" the government (thus the Latin *qui tam*). The person suing can recover personally up to 25% of whatever damages are eventually assessed. The bulk of the damages go to reimburse the U.S. government.

Goodearl and (now) Aldred filed the civil *qui tam* suit because they felt the Inspector General's office was too slow in its own investigation. But in 1991, the Department of Defense charged Hughes in criminal court with willfully conspiring to defraud the Government. The charges were defrauding the DoD by "knowingly and deliberately producing hybrids that had not been tested in the manner specified by contract and the pertinent military specifications...and to make false statements, writings and representations on documents in a matter within the jurisdiction of the DoD."

The civil lawsuit was put on hold while the criminal accusations were settled. The criminal trial lasted a month. Hughes' lawyers constantly battered at the credibility of the two main witnesses, Goodearl and Aldred. They claimed that the only fraud that had been committed was the AMRAAM incident, and that all the other incidents were distorted by Goodearl and Aldred, and the Department of Defense. It was a difficult and ugly proceeding, especially for Goodearl and Aldred.

Outcomes

On June 15th, 1992, Hughes was found guilty of conspiring to defraud the government. Donald LaRue, who had also been charged, was found not guilty. Comments by the jury suggest that they felt LaRue had himself been pressured into his actions, and that the company was to blame.

After being found guilty in criminal court, and after an unsuccessful attempt to appeal, Hughes began to negotiate in the civil suit. They agreed to a settlement in 1996. Hughes was assessed 4.05 million for their fraud. Goodearl and Aldred were awarded \$891,000 of this amount (22%). Hughes also had to pay the legal fees for Goodearl and Aldred (\$450,000).

Both Goodearl and Aldred were profoundly affected by their decision to blow the whistle, and by Hughes retaliation. Goodearl and her husband had to file for bankruptcy, and Aldred was on welfare for a year before she could find another job. Goodearl's marriage eventually broke up. Still, both felt they had been correct in blowing the whistle. After the final settlement, Aldred said, "Despite the toll it has taken, it was the right thing to do."

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Name

Cameron Hill

1. List 3 to 5 relevant stakeholders in this case.
2. Pick three stakeholders, and describe the duties and rights these stakeholders have toward each other. This is best done with a drawing of each stakeholder with arrows indicating duties one owes to other and rights one has.
3. Using the three stakeholders identified in question 2,
 - a) Determine to what degree each stakeholder's duties were fulfilled or neglected.
 - b) Determine to what degree each stakeholder's rights were violated or protected, and by whom.
4. Construct a promising alternative scenario that could have potentially avoided the these problems. An alternative does not have to be perfect or even optimal, to be better than what happened.
5. The AIChE code of professional ethics is a guide for chemical engineers. What professional and ethical issues highlighted by this case are addressed in the AIChE code of Ethics?

AIChE Code of Ethics (Revised January 17, 2003) [<http://www.aiche.org/About/Code.aspx>]

Members of the American Institute of Chemical Engineers shall uphold and advance the integrity, honor and dignity of the engineering profession by: being honest and impartial and serving with fidelity their employers, their clients, and the public; striving to increase the competence and prestige of the engineering profession; and using their knowledge and skill for the enhancement of human welfare. To achieve these goals, members shall:

1. Hold paramount the safety, health and welfare of the public and protect the environment in performance of their professional duties.
2. Formally advise their employers or clients (and consider further disclosure, if warranted) if they perceive that a consequence of their duties will adversely affect the present or future health or safety of their colleagues or the public.
3. Accept responsibility for their actions, seek and heed critical review of their work and offer objective criticism of the work of others.
4. Issue statements or present information only in an objective and truthful manner.
5. Act in professional matters for each employer or client as faithful agents or trustees, avoiding conflicts of interest and never breaching confidentiality.
6. Treat fairly and respectfully all colleagues and co-workers, recognizing their unique contributions and capabilities.
7. Perform professional services only in areas of their competence.
8. Build their professional reputations on the merits of their services.
9. Continue their professional development throughout their careers, and provide opportunities for the professional development of those under their supervision.
10. Never tolerate harassment.
11. Conduct themselves in a fair, honorable and respectful manner.