



Online Ethics Center  
FOR ENGINEERING AND SCIENCE

## **Salvador Castro - (Barus Awardee 2001)**

### **Author(s)**

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### **Description**

Salvador Castro received the Carl Barus Award for Outstanding Service in the Public Interest in 2001 in recognition of "his commitment to the public safety, in reporting a dangerous product design to the Food and Drug Administration at the cost of his job."

### **Body**

The engineer involved is Salvador Castro, a senior engineer in the field of biomedical devices, with degrees in electrical and in mechanical engineering. He is licensed in Pennsylvania and in New Jersey.

Toward the end of 1995, a few months after starting work at Air Shields/Victor, in Pennsylvania, he was asked by a colleague to check out a respirator sold to hospitals for use by infants. He found that there was a serious design defect. As a result of the misplacement of a relief valve, there were circumstances under which an infant could be subjected to a dangerously excessive lung pressure. The problem could have been corrected easily, by relocating the valve to a position close to the subject. Several hundred of these devices were in the field.

Castro brought the problem to the attention of a manager and assumed it would be taken care of. (In his past experience with the company--he had worked there a number of years ago--such matters had been dealt with promptly.) However, when he checked again some months later, he found that nothing had been done and it

appeared as though the company was going to try to cover up the problem. He remarked that, if nothing was done, he would report the matter to the FDA. Shortly afterward (3/3/96), he was peremptorily fired, as having failed to meet the requirements for his position as senior engineer.

He subsequently learned that a hospital physician had also noted the defect and that there was already some involvement with the FDA. However, it appears that the FDA did not take effective action; one facet of this case is this regulatory failure.

Castro engaged an attorney and initiated a wrongful discharge case. His principal goal was to establish a public policy exception to the at-will-employment doctrine in the state of Pennsylvania...

Castro appealed to the IEEE (Institute of Electrical and Electronics Engineers) for support. As a member of the IEEE Ethics Committee (later chair), I asked Mal Benjamin, an engineer with a great deal of experience in the bio-engineering field, and with very specific experience in hydraulic issues, to check out Castro and his allegations. He met with Castro and reported that he appeared to be an able engineer, and that his assertions about the respirator design error were clearly valid. I subsequently met Castro, on several occasions, and he struck me as a competent, conscientious, and well balanced man. I suggested that he appeal to the IEEE MCC (Member Conduct Committee) for help. He did so and that body recommended that the IEEE assist him. Subsequently, the IEEE Board of Directors authorized the IEEE attorneys to meet with Castro's attorneys with a view toward entering an amicus curiae brief in support of the principles involved in Castro's case.

### **Contributor(s)**

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### **Rights**

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### **Resource Type**

Case Study / Scenario

### **Parent Collection**

Award Winners

## **Topics**

Public Health and Safety

Whistleblowing

## **Discipline(s)**

Engineering