One of the most interesting cases of computer sabotage occurred at the National Farmers Union Service Corporation of Denver, where a Burroughs B3500 computer suffered 56 disk head crashes in the 2 years from 1970 to 1972. Down time averaged eight hours per incident. Burroughs experts concluded that the crashes must be due to power fluctuations. Total expenses for extensive rewiring and testing exceeded $2M (in today's currency) but the crashes continued despite the improvements. Further analysis showed that all the crashes had occurred at night when old Albert the night-shift operator had been on duty. Despite Albert's outstanding helpfulness and friendliness, management installed a closed-circuit TV (CCTV) camera in the computer room -- without informing Albert. After yet another crash occurred, the CCTV tape showed Albert opening up a disk cabinet and poking his car key into the read/write solenoid, shorting it out and causing the 57th head crash.

The next morning, management confronted Albert with the film of his actions and asked for an explanation. Albert broke down in mingled shame and relief. He confessed to an overpowering urge to shut the computer down. Psychological investigation determined that Albert, who had been allowed to work night shifts for years without a change, had simply become lonely. He arrived just as everyone else was leaving; he left as everyone else was arriving. Hours and days would go by without the slightest human interaction. He never took courses, never participated in committees, never felt involved with others in his company. When the first head crashes occurred--spontaneously -- he had been surprised and excited by the arrival of the repair crew. He had felt useful, bustling about, telling them what had happened. When the crashes had become less frequent, he had involuntarily, and almost unconsciously, re-created the friendly atmosphere of a crisis team. He had destroyed disk drives because he needed company.

In this case, I blame not Albert but the managers who relegated an employee to a dead-end job and failed to think about his career and his morale. Preventing internal sabotage depends on proper employee relations. If Albert the Saboteur had been offered a rotation in his night shift, his employer might have saved a great deal of money.

Managers should provide careful and sensitive supervision of employees' state of mind. Be aware of unusual personal problems such as serious illness in the family; be concerned about evidence of financial strains. If an employee speaks bitterly about the computer system, his or her job conditions, or conflicts with other employees and with management, TALK to them. Try to solve the problems before they blow up into physical attack.

Another crucial element in preventing internal and external sabotage is thorough surveillance. Perhaps your installation should have CCTV cameras in the computer room; if properly monitored by round-the-clock security personnel or perhaps even an external agency, such devices can either deter the attack in the first place or allow the malefactors to be caught and successfully prosecuted.

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