# Pranking bosses, friends, and competitors

**Paul Rako** - April 01, 2011

Analog engineers are notorious for pranks they play on their bosses, their friends, and their competitors. Some pranks become legendary. In 1970, National Semiconductor announced that they were reducing the lawn maintenance in order to save money. Their famous IC designer Bob Widlar promptly bought a sheep from a local farmer, chained it to the front lawn of the building, and called the San Jose Mercury News.

This was just the most public prank Widlar pulled. Pierre Lamond was a National Semi executive who was a stickler about employees getting to work on time. This was a tall order for a bunch of analog guys. So Bob Dobkin and Bob Widlar came up with a circuit that would steal cycles from the 60 Hz wall socket that Pierre's clock was plugged into, making it lose a few minutes every day. Widlar asked his brother James, who worked in the facilities department of National, to sneak into Lamond's office and do the deed, cobbling the circuit into the socket. It drove Lamond nuts. He bought three new clocks before they tipped him off to the prank. IC designer Carl Nelson recalls, "I can still hear his screams echoing down the halls of National".

When analog guru Bob Pease was at Philbrick he had a healthy competitive dislike for Analog Devices, who also operated out of Boston. So Bob took an old scrap op amp module and in an inspired move, he had his friends in the silkscreen department put a very professional label on the device, 4QAD. If say it out loud a few times Bob's profane message to Analog Devices (AD) should become apparent. Bob made up several of these, one of which he sent to Dan Sheingold's 34 years ago, so long ago Dan forgot about the prank and had to ask Pease just what that amplifier did.

Sheingold wasn't the only ADI employee subject to practical jokes. Pease noted how Analog Devices was touting Paul Brokaw's new CMOS circuits with a custom soup can. So Pease took the can of "CMOS DACs", drilled a small hole in the bottom and back-filled it with sea moss. He managed to solder up the hole in the can and sent it to Brokaw. They hoped Brokaw would enjoy his "sea moss soup". Apparently he Post Office did not cooperate. When recently told this story, Brokaw says that, "I never got the SeaMoss. I never even knew about it until now."

Pease was not the only competitor to respond to the ADI CMOS DAC soup cans. Jim Williams and Jim Cecil bought a Big Mac, stuffed a bunch of National Semi CMOS DACs into the meat patty put the burger back in its original box and sent it to ADI's Dan Sheingold with a note, "Enjoy your Big DAC attack". Sheingold told Williams that the burger "was a bit green around the edges" by the time he got it.

There is sweet justice in some pranks. Years after Dobkin's prank on Lamond, application engineer Jim Williams noted that Dobkin was making a few too many comments about the time employees were getting it to work. So rather than do a cycle-stealing circuit, Jim and co-worker Len Sherman took down Dobkin's clock and put in a slower crystal. Dobkin bought a new clock. So then they put in a faster crystal. Dobkin bought a new clock. Then Jim used a file to reshape the pole pieces on the

electric motor. “The hard thing was making his clock run backwards,” Jim confesses. When Dobkin saw his clock doing this, he knew that a perpetrator had been made a victim.

Williams didn’t just torment Dobkin with the clock. He put carefully cut pieces of electrical tape over the IR receivers on Dobkin’s new Mercedes Benz. That stopped the keyless entry working. It took several trips to the dealer before the service guys figured out what the problem was.

Years later, after they had left National and gone to Linear Technology, Carl Nelson pulled two pranks on Williams. In one, he put a small coil of wire inside the socket holding the true-RMS chip Jim was characterizing. It made the formerly fast part run inexplicably slower. Carl stopped by every hour and asked Jim how it was going, suggesting it might be a wiring problem. By the end of the day Williams was “really testy,” so Nelson admitted to the prank.

Nelson didn’t just sabotage Williams’s parts. He once sabotaged Williams’s office. Jim kept detailed cryptic outlines of his next article on the whiteboard. So Nelson snuck in, replaced Williams’ s whiteboard with an erased one that bore the note: “Please help keep this building looking clean and orderly,” signed, “janitor.” Nelson reports Williams came in the next day and just stood there, staring for a long time, finally saying, “This is just too awful to be true, so it can’t be”. Nelson brought Williams’s original whiteboard back after everyone stopped laughing.

They didn’t stop at pranking co-workers. A friend had given Williams an egg-shaped piece of aluminum carbide. Williams took it into work and announced that he had an unbreakable egg. Most members of the engineering lab immediately stopped work, trying to break the egg. They put it in a huge vice and hit it with a hammer, to no avail. They lodged it in a crack in the sidewalk and hit it with a sledgehammer. Unfortunately, their aim was a little off, and the egg ricocheted off a car parked a hundred feet away. Having wasted hours of Linear Tech engineering time, Nelson then sent the egg to Maxim so they could waste a lot of their engineering time. The egg came back a week later, broken in half, with a note that read, “What’s the problem?” Recent investigations into the incident have been unsuccessful in uncovering the Maxim method, but it is rumored to involve hot oil and liquid nitrogen.

Maxim engineer Bruce Moore recalls another Bob Widlar prank from his National Semi days, the “hassler” circuit. Widlar grew tired of certain loud persons who came into his office. He built a little microphone-amplifier circuit to deter them. It detected loud sounds and amplified and frequency-shifted them upwards. This put an annoying tinny echo in the loud person’s ear. They soon left Widlar alone.

Moore also recalls a classic prank from his Raytheon Semi days in the 1980s. An IC designer had built a complex breadboard. It had four layers of kit-transistor parts with point-to-point air connections, all hooked up to a dozen power supplies. The moment of truth came when the designer turned on the power supplies for the first time. Paul Dixon had run a thin plastic tube hidden from the back of the breadboard to the end of the bench. Dixon was hiding there, 30 ft away, and blew cigarette smoke into the tube. The IC designer switched off all the power supplies and just sat there looking at the circuit. Dixon sauntered over and asked, “Hey, how’s it going?” The designer just said, “Fine, just fine.” He wouldn’t admit anything was wrong. Moore recalls laughing his butt off.

Be careful if you prank your boss. In 1975 National Semiconductor’s Dennis Monticelli worked on a team that developed a camera control chip. Kodak had traveled to Silicon Valley to review the project. Monticelli’s boss, IC designer Tom Frederiksen, was usually calm and collected. This day he was quite nervous, what with the customer visiting and all the top National bosses looking over his shoulder. It turned out there was only one good wafer of the new camera chip. So Frederiksen told Monticelli to get the sole good wafer to the packaging group right away, so the Kodak executives

could take the parts back to Rochester. Instead, Monticelli grabbed a bad wafer from the lot with his tweezers and jogged down the hallway. As he approached Frederiksen's desk he pretended to trip and the wafer flipped off the tweezers and struck the hard floor, breaking into a bunch of useless pieces. Monticelli feigned shock, but that was nothing compared to the look of horror on Frederiksen's face. With a straight face Monticelli stammered, "I was rushing. I'm so sorry! What are ***you*** going to tell Kodak?" After the last shade of color had drained from Frederiksen's face, Monticelli's accomplice, technician Bob Sleeth, came up behind him, safely holding the real parts in a wafer carrier. Monticelli estimates that if prank had gone on for 11 seconds instead of 10, he might not have worked at National much longer.

You should beware of prank escalation. Len Sherman, application engineer at Maxim recalls a prank exchange with Jim Williams when they were at MIT. As he loves to do, Williams had bought an old broken oscilloscope and worked on it all day, bringing it back to life and perfect operation. After Williams went home for the night, Sherman put a piece of toilet paper under Jim's oscilloscope graticule. The paper was unnoticeable, but made the scope trace fuzzy. It looked like a focus problem. Jim went crazy the next day trying to fix this problem. He had the covers off and was measuring all the high voltage circuits. It took a few hours before he found the paper.

To retaliate, Williams took the hinge pins out of the lab door and tied a rope to the doorknob that he pulled back into the room, threw over a beam in the ceiling, and tied to 100 pounds of ballast. The next morning Sherman put the key in the lock and turned the knob. The entire door left it hinges and glided, upright, back into the lab about 10 feet. It then stopped and fell over. "It looked like something out of a Stephen King movie," recalls Sherman.

Sherman then rigged up a water nozzle to a photo-switch triggered by the lab lights. He rigged a soldering iron with coil of solder around it used as a fuse, to time out the prank. Sherman didn't want to flood the lab, just run the water nozzle for a minute or so. Williams got wet.

So exercise caution if you don't want to get caught in a ***prank backlash***. It is much safer to do fun pranks like Analog Devices engineer Sandoe Thomsen did to a co-worker who was constantly bragging about the great mileage his VW Beetle was getting. Thomsen started adding gas to the tank. IDT analog IC designer Paul Brokaw worked with Thomsen at this unamed previous company at the time. Brokaw reminisces. "It was back in the 1950s when Beetles were rare.  Sandoe began tracking this guy's mileage and adding gas to his tank.  Remember the old Beetle had no gas gauge, making this occasional fill-up pretty hard to notice.  I don't recall that they got it to 100mpg, but it was a big number. And then Thomsen cut him off, cold turkey. The guy went nuts and took the car in to get the mileage fixed. The VW mechanics confirmed to him that he was nuts.

National Semiconductor application manager Alan Martin pulled another delightful prank back when he worked at Linear Technology. LT vice president Steve Pietkiewicz was a design manager back then. Alan took a lithium coin cell and wired up a relaxation oscillator that flashed a blue LED once every 45 seconds. The flasher would run for months. Then Martin put the LED behind the hollow faceplate bolt of Pietkiewicz's Tektronics 547 oscilloscope. You would only see the flashing if you were sitting directly in front of the 'scope, and then only notice it out of the corner of your eye. Martin was worried about Pietkiewicz's reaction. Messing with a man's oscilloscope is as bad as dating his wife, a very sketchy proposition. It took Pietkiewicz six weeks to notice it, but he was delighted, perhaps since Martin used a LT1316 to make the relaxation oscillator. Pietkiewicz's group had designed the part.

EDN is having trouble getting confirmation of a sample die with a middle finger salute on them that National Semi engineers would send to competitors asking for samples. Neither have we been able to confirm that engineers replaced National Semi VP Bob Swanson's yellow Porsche with a wrecked

one of the same year and color. We have learned that Bob Swanson warned all his employees to not park in visitor spots after he founded Linear Tech. Jim Williams and Carl Nelson waited until Swanson parked his red Porsche and then stenciled the parking spot with “visitor.” Swanson’s secretary found it quite mirthful. Mr. Swanson was not amused.

The beauty of these analog pranks is that they were not arbitrarily or cruel. They made a not-s--subtle comment about cost cutting, time management, personality quirks, and marketing campaigns. If you have pulled a good-natured prank on your boss, or a coworker, or a competitor, please add it to the comments on this article below. And no, charging up a capacitor to 200 volts and tossing it to the lab director is not good-natured.

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