

tion models (HBM, CDM, MM) by 2010.

The IEEE Reliability Chapter held a joint meeting with the ESD (Electro Static Discharge) Society. This meeting focused on proactive measures to deal with the challenges of unexpected ESD failures in new locations in the manufacturing process due to the industry wide trend towards ultra-sensitive (ESD Class 0) components. The interactive discussion stressed countermeasures including both manufacturing and design enhancements.

Dr. Terry L. Welsher retired from Lucent Technologies-Bell Laboratories Engineering Research Center in 2001 as the Director of the Quality, Test & Reliability department. He has also been active in quality standards and roadmapping activities with SEMATECH, the ESD Association and the JEDEC 14 Quality and Reliability Committee. He holds a BS in Chemistry from Florida State University and Ph.D. in chemical physics from the University of Texas at Austin.

G. Theodore Dangelmayer is the president of Dangelmayer Associates, L.L.C. and has been developing ESD programs since 1978 for large global corporations as well as individual proprietorships. He is currently president of the Northeast Chapter of the ESD Association and a member of the ESD Association International Council of Education, 2003 Technical Program Committee and is the chairman of the ESDA Corporate Sponsorship Programs.

This meeting was held on Wednesday, **February 8** at RSA Security in Bedford, Massachusetts. It will began with pizza and personal networking at 5:30 PM. The presentation followed at 6:00 PM. IEEE members and non-members are welcome. See the RSA Security website at <http://www.rsasecurity.com/node.asp?id=1059>

GETTING OUT OF CALCUTTA

By Russell V. Carstensen, PE, NCE

It started at 1 AM. First, let me say that I hate flying into or out of Orlando. It is like flying out of Calcutta. Everyone wants to go at the same time. They are traveling in great family hordes. They are tired and cranky with mouse ears on their heads – not an example of humanity at its best. Even so, sometimes you just have to bite the bullet and go with the flow.

Such was my case. I had flown in for a one-day meeting. I had trouble getting a flight in at a reasonable time and even worse luck getting out. The best I could do was a 6 AM departure. Loyal to the “two hour rule,” I concluded that I would have to be at the airport at 4 AM. I asked the hotel for a 3 AM wake up call to allow for shaving, packing and checkout.

My wife called from home (10 PM her time, 1 AM my time) to say that my flight had been delayed until 9 AM and I would not get to Denver in time to catch my scheduled flight so I have been booked on a 2 PM departure for Seattle. That schedule will have me in at about 5:30. I had a prior commitment to a meeting that evening at 7:30, but if all went well I could just make it. My wife then casually mentioned an “800” number I could call for details. She then announced that it was her bedtime and left the matter in my hands.

I called the 800 number. It apparently was the airline’s Bangladesh office. The fellow on the other end had a thick accent along the lines of Apu from the Simpsons. He confirmed that the flight had indeed been delayed but added that I still had to check in for the 6 AM departure in case the plane left earlier than the now anticipated 9 AM. In my sleep deprived state I accepted his fuzzy logic. It was now 1:45 AM. My 3 AM wake up still stood. Did you ever try to go back to sleep with the pressure of only having one hour to do it? Don’t tell me about your success because I really don’t care. I can only say that it does not work for me.

I counted cracks in the ceiling for about an hour. At 2:45 AM I said (well, we will forget what I said - but rest assured that it wasn’t nice) and got up to shower. I finished freshening up, packing and straightening the room and headed to the check out desk. When I got there the night clerk couldn’t check me out because she was backing up their accounting system

and it would be some time before the computer would be available. However, she offered to fax me a receipt.

I caught the shuttle and headed for the airport. Because everything went smoothly, I arrived at the check in counter at about 3:50 AM. There were a dozen people in line already and more were arriving every minute. A skycap came by and announced that the ticket counter would open at 4 AM. I pointed to the clock on the wall and reminded him that it was now 4:05. He corrected himself by saying that the counter would open at 4:15.

At 4:20 the agents appeared. Apparently the ticket people were delayed in the secret room where all agents go to plot frustration of the public. They had worked out a new game plan. As they came out of the secret room, they announced that anyone going to Philadelphia, Pittsburgh or Washington needed to go to the airline next door. They also pointed out that those of us with e-tickets needed to be in another line. I thus moved to the newly designated e-ticket line. After the line formed, she then announced that those on the flight to Denver (my flight) needed to be in other ticket line because they had to be re-ticketed. I said some unkind thing to myself (the joy of traveling alone) and jumped back into the line I had just left. I lost ground by a half dozen mouse eared munchkin pods but was not as far back as if I had gone to the end of the line.

After a respectable wait, I found myself at the counter prepared to lose another battle of wits. I calmed myself by taking a deep breath and swearing not to answer "How are you?" with a litany of my adventures so far. I was faked out by a greeting of "This is going to be a terrible day!" We then started the transaction. She confirmed that I had been rescheduled and was ticketed through to Seattle as my wife had said. I did not ask why Apu didn't know. As a reward, her computer froze and she had to reboot. Then she did an unexpected reversal and pointed out that by her scale, my bag was seven pounds over the limit. I could take out seven pounds or pay a fee of \$25.00 (for which I would not be reimbursed). I opened the bag but could not find seven pounds that I could take with me (I already had two carry on bags, my computer and my briefcase) and threw in the towel. When she went to print the ticket, her computer froze again and she had to reboot. While we were waiting, she mentioned that yesterday a man had become so

agitated that he jumped the counter to get the agent. Instead of registering shock, I asked, "Did he score?"

As I arrived at my assigned gate. I cracked the code. They didn't have a pilot to fly the plane! The pilots would not arrive until 9:30 so, of course, the flight will be delayed yet a bit more. Meanwhile, we were told that we could board the aircraft to be ready to depart as rapidly as possible after the captains reported. Oh, and by the way, without a pilot they can't run the air conditioning. So it will be hot in the plane but please bear with. Miraculously, a passenger offered to start the air conditioning. Turns out that he is a commuter pilot who is checked out on the same aircraft type. The ground people knew him and let him go ahead.

My seat group was called to board. I headed for my seat. I was on the aisle. The boarding slowed to a trickle. No one has come to fill up my row. The boarding completed and still there is no one in my row. They close the doors. I have the row to myself! At last things are beginning to turn. I have room to stretch out and no one to climb over me to get to the restroom. I am out of Calcutta. I can look forward to four hours of sleep. Life is good!