

Motley #12

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SEEING A SPACEX LAUNCH

On Sunday night, October 7, SpaceX launched a satellite into a polar orbit for Argentina from the Vandenberg launch site. The Falcon rocket flew north along California and came in sight where I was in Lafayette, 375 miles north of Vandenberg. I happened to be looking southward when the rocket came into view and I took the attached photos. The first photo shows the rocket with its exhaust streaming just before the first stage dropped away.



Falcon 9 just before stage separation

As I watched, the first stage separated, the second stage ignited, the first stage re-started to do the “boostback” to (successfully) return to the launch site. The second photo shows the first stage after it made its U-turn and headed back south to Vandenberg.



Falcon 9 headed back to Vandenberg

From my angular measurements and online flight information, I estimate that at separation the rocket was 90 miles high and was 180 miles south of me, 195 miles north of Vandenberg. It was going 1 mile/sec.

Although the view was quite spectacular, there was little coverage of it in the local news. I guess not many people actually look at the sky as I do.

A BRUSH WITH MADNESS

Gregory Benford

At times, life comes in on your blind side and whooshes by, leaving a startled insight: our orderly days teeter on the cliff-edge of mortality.

In the winter of 1993 my university, UC Irvine, asked me to present two talks in a public lecture series on risk. I had done some risk assessment for several federal agencies, notably of the nuclear waste repository in New Mexico, the Waste Isolation Pilot Plant. I described that in my nonfiction book, Deep Time. So I gave the lectures, larded with statistics and examples of how we vastly overestimate some risks and ignore others—which is still true. We think we're better off controlling our transportation, for example, but driving a car is far riskier than taking an airplane.

The talks got a big audience, several hundreds, nearly filling the room. At both, I noticed that a man sat at the very top of the bowl-shaped lecture hall and peered intently at me the whole time. After each talk, a dozen or two gathered near me to ask questions. That intent, frowsy-haired man stood at the edge, never saying anything. Sometimes he even glared, mouth working, yet still said nothing. I found his intensity unnerving and carefully stayed in the hall until he had gone, then went to my car and drove home.

On April 4, 1996, I opened the morning LA Times to see a big color photo of the same man: Ted Kaczynski, the Unabomber. The photo had the same glaring eyes, fixed grimace, clenched teeth. I sucked in my breath so hard my wife paused, fork in hand, startled. "What's wrong?" she asked.

"Nothing, now," I said.

The FBI had sought him for years. He had killed three people, blinded and dismembered others, with mail bombs. He improvised explosive devices contained in a cardboard box, wrapped in plastic bags with various tape and rubber bands. With lengths of pipe, soldering wire and explosive chemicals, including black powder and smokeless powder, he rigged triggers that went off when the package got opened. Sometimes this caught the target, other times someone in the mail room. A cowardly, inaccurate attack. The FBI spent years tracking the bomber, finding him finally from a tip from his brother.

I had read about this bomber and been careful with unknown packages, as did my physics department. I never thought back to those lectures.

After seeing that front page photo, I decided to say nothing about it, except to my wife, Joan. About a week later an FBI agent knocked at my office door. Did I recognize this man?—same photo of Ted Kaczynski. Yes, I did. So?

The agent said, almost casually, that *I was on a list Kaczynski made of people to bomb*.

I sat there, shocked into silence, as the agent went on. Carefully I told the FBI agent my story. Had I seen him since? No.

"Could I see the list?" No, the FBI was keeping it secret. There may be copycats who would use it.

I nodded. Anything I should do? Not really.

Shortly after this my biologist friend Michael Rose came by my office with news that the FBI had visited him, too. Same story: he was on the list, along with fellow evolutionary biologist Cynthia Kenyon. They were exploring the fundamental evolutionary constraints on longevity of species, including us. Michael thought the Unabomber had seen a profile of him in Scientific American. Cynthia Kenyon had the same level of prominence in that small field.

Why would Ted Kaczynski's politics oppose extending human lifespan? Puzzling. So, too, for me—why did he care about my notions of how to assess risks?

"I'm used to crazy-looking people showing up at my talks," Michael Rose remarked. I wasn't.

The FBI did not ever disclose the names on Kaczynski's list, as far as I know. I kept quiet.

The crazed bomber is often cited as being a genius-turned-madman. He went to Harvard at age sixteen and later earned a PhD in mathematics from the University of Michigan. He had become a faculty member of UC Berkeley in 1967, the same year I joined the Livermore Lab and had a Berkeley office too. I had never seen him. He resigned a few years later.

Was he somehow opposed to something I treated in my novels and stories? Years later still it emerged that among his many books in his isolated Colorado cabin were "Asimov's Guide to The Old Testament" and "Asimov's Guide to the New Testament." I knew it was a commentary that described the Bible not as a theological work, but as a historical account incorporating fact, propaganda and myth. Asimov was the only science fictional connection to him. So his targeting of me meant nothing about my fiction writing, apparently.

But why should his anti-technology stance, as revealed in the essays he forced into publication, catch his eye? My talks had drawn from Technological Risk by Hal Lewis, and I had adopted his stance. Lewis felt that hoping for a risk policy that couldn't be excessively politicized (as had, for example, nuclear power) was possible but unlikely. Technological elites and their judgments can't be kept from public emotions for long.

I thought this over and finally just shrugged. Kaczynski was a mathematician, unbalanced, so...nothing to learn. Except that in our deeply interconnected world, openness means vulnerability.

I have seen disturbed people before and since these two incidents. I was once followed from a book signing by an insistent and increasingly hostile guy who insisted that he ranked with Einstein. He had simply rearranged the $E=mc^2$ equation and posted it as an advertisement in a shopping newspaper. So where was his Nobel?

You can't make this stuff up.

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The Unabomber

MAILING COMMENTS

Dale Cozart: *Space Bats & Butterflies*: interesting remarks in this issue. The most recent science fiction I read is Gerry Nordley's *Prelude to Stars*, which is a collection of short stories about the development of the solar system over the next few centuries. They're very Analog-type stories with a problem to be solved in an exotic environment. Nordley has substantially improved his writing ability in the last decade and the stories demonstrate that. He still has not been able to sell a book to a publisher; all his books thus far have been self-published. He gets things right technically and most people non-technical people would be bored by the details. I've acquired and I'm going to read his interstellar short stories *Amongst The Stars*.

I look at your website and see that it is pretty ancient. My own favorite alternate history novel is currently *The Berlin Project* by my brother. It's technically accurate and a great deal of it actually happened. In particular, the baseball player Moe Berg really was a secret agent who was sent to a *Swiss scientific conference during the war with instructions to assassinate

Heisenberg if he gave any indication that they were succeeding in developing a nuclear weapon. They weren't of course, and never got anywhere near it, so Moe Berg let him survive!

Randy Everts/in memoriam: Harlan Ellison: I got along very well with Harlan ever since I met him at the '64 worldcon. Went to his house at least once with Rotsler and saw him at quite a few conventions. I wonder what is going to become of the enormous library and art collection his widow has inherited.

Patrick Ijima-Washburn/Fandoman: I totally entirely agree with Ray Bradbury on short stories. I've seen so many people fail by trying to write a novel 1st without having any prior experience in shorter fiction. I've always felt that a good long document should be a descendent of a good short document. So write the short one 1st and see if it even needs to be expanded.

Ray lists about 20 authors to read short stories and poems of, but only one of them is recognizably a science fiction writer. That's rather striking. There were certainly a lot of really good short story writers in science fiction during Ray's great decades from the 40s to the 60s.