

LAST SHOT

The last time I went to French Guyana was in 1988 to view the launch of Spacenet 3R. The “R” stood for ‘Replacement:’ this payload was to fill the empty slot in the sky created when Spacenet III blew up in September 1985.

Two years had past since my last campaign, and many things had changed. My career had progressed to the point where it was hard to justify sending me just for photography. By now I was a Senior Project Manager, and I had much greater responsibilities. I really should have hired a freelancer to go shoot it. But I wanted to go do it and the trip was short enough for me to juggle my schedule. That Dennis wanted to shoot video in addition to stills made it somewhat easier to sell the trip to my management. Video technology had changed too. All we needed this time was a camera: we would not be shackled to lights, the portable deck and engineer. The Sony Betacam CCD/SP was perfect for this kind of shoot.

Of all the changes over the last two years, the most profound were the ones that were shaking GTE. Spacenet was originally a piece of baggage attached to the Sprint acquisition in 1983. By 1988, Sprint proved to be impossibly unwieldy to run. It was a startup venture, just starting to expand its customer base and its long distance network. Unfortunately, it was absolutely hemorrhaging money. Operating costs, costs of unbridled growth associated with increasing market share, and construction costs for the new all-digital network combined to turn Sprint into a gaping wound in GTE’s coffers. GTE tried to drop Sprint like a flaming frying pan.

But AT&T instituted substantial price reductions, and this drove Sprint’s prices down with them. Nobody wanted to buy such an obvious liability. GTE had never been shackled to such an albatross before. The best they could do was find someone with whom to share the losses. United Telecommunications agreed to a joint venture, and on July 1, 1986 GTE Sprint became US Sprint; a corporation equally owned by GTE and United Telecom. In its first six months alone, US Sprint incurred pre-tax operating losses of \$357 million. The new year was a nightmare too. Sprint took a tax dodge that let them write off obsolete facilities and uncollectable customer bills. It cost GTE another \$175 million. It just wouldn’t stop bleeding.

And this wasn’t “just business,” it was personal. People were devastated, careers were shattered and nothing would ever be the same again. Of course, GTE management claimed it was nothing more than “the right decision at the right time” but it shook the corporation to its foundations. Finally in 1988, GTE sold a 30.1% interest in Sprint to United Telecom. GTE’s commitment would trail off with United ultimately gaining full ownership of the company. As usual, top management took credit for making a shrewd business decision. They said:

"The reduction of our interest in US Sprint brings immediate and long-term benefits. Immediate benefits are an improvement in

earnings by eliminating the losses associated with the joint venture and an increased cash flow. Long-range, we will recoup about \$1.2 billion of the book value of US Sprint when United Telecom takes full ownership. Also of importance is the fact that the move enables us to concentrate more attention and resources on the areas of telecommunications in which we have traditionally been active".

It's like taking credit for only maiming the dog and not killing it outright. And nowhere is there ever a hint that acquiring the thing in the first place was a mistake.

For Spacenet, cutting the umbilical cord to its parent was a blessed event. Corporate types might have felt that Spacenet (formerly Sprint Satellite) lost most of their reason for existence. Spacenet was delighted because they were no longer tied to the inappropriate telephone customers and could go out marauding in the explosively expanding satellite communication marketplace. They leaped into this brave new world with gusto. In 1986, Spacenet signed a massive contract with K-Mart to provide a private data and video network for its 2100 stores. All sales would be reported directly from the cash register via satellite to a central database that would handle inventories, deliveries, scheduling and purchasing. A similar private network was sold to the US Secret Service to handle their communication needs. Spacenet's NewsExpress service allowed smaller stations access to satellite services. The broadcast networks continued to be big users, with ABC, CBS and CNN all using Spacenet transponders. In 1987, several more Skystar networks were sold, including ones for Prudential Basche Securities and Days Inns of America.

Spacenet 3R would build upon this success. On Tuesday, March 8, we flew down on the corporate plane, reaching Cayenne in the early evening. We were conscious of the fact that this was going to be our last trip ever to French Guyana, so we devoted Wednesday to seeing everything that we had missed on the previous campaigns.

We hadn't yet shot in the big S-1 Satellite Assembly Area. This is where the satellite arrives in its shipping canister, is carefully removed, checked out, tweaked and prepared for flight. The satellite is then moved out to the pad and mated to the top of the Ariane. Every time we got to Guyana, the satellites were already on the rocket and most of the time, the fairing was already sealed. We had shot in the building before: Ron Daleabout's guys worked there communicating with the satellite; but there was no business reason to go out into the arrival and check-out areas. This time, the CSG folks took us out into the huge high-bay clean-room environment, just for the hell of it. There were a couple of satellites in there, but they were dwarfed by the huge bay.

There we saw the world's only personal satellite: a very strange fellow named Rene Anselmo wanted to own a satellite business, so he went out and had one built. His company was called Pan Am Sat, and his irreverent logo was a dog peeing. You didn't have to be a big corporation to get into space any more.

A similar project was hitching a ride into space on our bird. Dr. Gerald O'Neil had founded a company called Geostar to provide global positioning and communications for ships and interstate trucks. His first payload, Geostar R01, was carried piggyback fashion on Spacenet 3R.

We finally got up to the tracking station at *Mont Paricaibo*. It is on a small ridge just west of ELA-1 and -2. It is much smaller than *Montagne de Peres*, but it's closer to the launch complexes. From the top, the whole space center was laid out before us.

It was hard not to be flooded by the memories when presented with such a wide shot. In front was the ELA-1 gantry, in which Rick Fillers and I last saw Spacenet II being sealed up for launch. Behind was the press site where we thought we were about to be killed by GSTAR 2's imminent explosion. To the right was the Technical Center where most of our friction with authority was generated. On the horizon were the Devils' Islands. We also had a good view of the construction of the long runway for the new *Hermes* space shuttle, which was designed to dock with both the Russian space station Mir and the American station Freedom. Huge new launch complexes were being surveyed, and it was clear that the little outpost in the jungle we first saw in 1984 was gone forever.

All morning long, we noticed the extraordinary security near the launch center. On the roads, there was a knot of troopers every few hundred meters or so. *Mont Paricaibo* was heavily guarded, and we were examined at two checkpoints before we reached the top. Not too far from the base of the ELA, they had a small four-barrel rapid-fire anti-aircraft gun. In the past, the Legion prided themselves in providing security so quietly that you never knew you were being protected. "If you don't see me, that's where I am," Robin Sword told me on Spacenet I. Today, different rules were in force. The Legion was a visible presence aggressively asserting its control over a little strip of French Guyana.

That night, we attended the launch rehearsal in the Jupiter Room, so we killed the rest of the afternoon in Kourou. We found that they'd built a space museum in the Technical Center. The building rose with cookie-cutter similarity to its architecturally stifled neighbors, but the collection it contained was very interesting. There was a nice array of flown artifacts, ground spares and models of different elements of the French space effort. They had a large model of the *Hermes* spacecraft that would soon be carrying French astronauts from Kourou to earth orbit. Decorating a whole wall was the record of the Ariane to date: sixteen successful launches, twenty-six payloads delivered and only four failures.

Thursday was devoted to interviews with Spacenet engineers and coverage of the arrival of the VIP's on the charter plane, which landed around eight that night. There was the usual party at the Novotel, and Dennis and I really got into the celebration. This was a pretty good batch of invited guests and everybody seemed to have a good time.

The star of the show was a woman from the Midwest who was clearly having the most exciting week of her life. When she got her invitation to the launch, she went down to Abercrombie & Fitch to be “outfitted.” She got off the plane in an immaculate khaki safari outfit, complete with trekking boots, safari jacket and hat. In the equatorial heat, she started to melt. The hat and jacket didn't make it out of the airport. The boots came off at Novotel, as did the slacks. When everybody started jumping into the pool some time after midnight, the shirt came off too. Wearing only a bra, panties and a champagne bottle, she finally looked comfortable.

Aside from her, the rest of the trip was comfortably predictable. On Friday, we had the press conference at *la Salle Optique*. After the presentations, there was the usual shopping/luncheon trip to Sinnamary. That afternoon, they pulled the service structure back to reveal the rocket, and that evening we set up at the new *Toucan* press site.

There were two launch windows; one from 8:28 to 9:04 PM and a second from 10:50 to 11:15 PM. It was a flawless countdown, and they fired the moment the first window opened.

Spacenet 3R was my seventh rocket launch, and I realized this was almost certainly the last time I'd ever see the spectacle, so I tried as hard as I could to remember everything. I had a good view of the cryo arm, and watched for its withdrawal just four seconds before ignition. The rich red flare blossomed in perfect silence over the beating of the cicadas. It hardened to a bright white and rose for a few seconds. And then the solids blasted on and it was like looking right into the noonday sun. But there's nowhere else to look. You simply cannot look at anything else as the rocket visibly picks up speed.

Now the sound, racing out concentrically across the swamps, the hellish sound smashes into us. Loud! Your body feels like a drum, pounded in from the outside, and vibrating with the sound.

Loud! The noise is so loud that the ears seem to hunker down and the sound almost seems to come from inside your head.

LOUD! IT'S LOUDER THAN ANYTHING YOU'VE EVER HEARD. SCREAM YOUR LUNGS OUT FOR YOU CANNOT POSSIBLY BE HEARD.

Loud! But there is an enormous texture to it. It was the deep *basso profundo* of the liquid fuel engines that shook the heart. Screaming above this was the higher tearing sound of the solids roughly intrusive but delicately sharp. It is a powerful and compelling sound.

There was a low overcast, and the Ariane was only visible for the first half minute of flight. Then it was swallowed by the clouds at about the same time the solid rocket boosters were shed. Because we had always concentrated on the liftoff, I had missed several opportunities to pick up shots of the rocket in flight, so as soon as I was done shooting with the long lenses, I picked up a Nikon with

a 200mm telephoto on it and waited to see if the rocket would become visible above the clouds. As I'd hoped, it popped through for a few moments, but it was enough to squeeze off a few shots.

And, there's no getting around it, there's just something sexual about the whole thing. Even the most restrained are screaming their lungs out, and many are moved to tears although afterwards they will be hard pressed to explain why. One of the ladies hanging out at the photo line became absolutely mesmerized by the spectacle and unconsciously started walking toward it, out into the swamps.

The countdown builds tension, but as it nears zero, there is a growing feeling of inevitability that we'll launch. Then, there's the blazing fire of ignition, and the rocket rises, spewing out its tongues of flame into the night. Then the flaming phallus flies triumphantly out of sight. And you know that heart-pounding ear ringing feeling you sometimes have in great sex? Well, here this rocket was shaking our chests and ringing our ears with our pants still on. And then one quick blast and it's over. Sorry if you're not done honey, cause the show is finished and there ain't no take two. And there's no way to get that baby back here for a second ride. You might as well get over it.

As before, the sound of the rocket gently faded up and away, and the sounds of crickets and the invited guests returned. My career in rocketry was over.

The rookies asked "Is that all there is?" and the veterans quietly packed out their gear. The busses started, and we drove past the empty pad to the firehouse. The mood was high and light and the guests got blitzed on wonderful French champagne faster than usual. Within the hour, Rick showed up: the report from Guam was good: we had nailed the parking orbit. Everybody partied passionately that night.

The rest of the Spacenet 3R trip was especially anticlimactic. The day after the launch, we were scheduled to visit the Islands, but the weather was rough and the trip was almost canceled. Too few invited guests went out to justify photographing it, so Dennis and I took a short river tour in a flat bottomed boat, and generally spent the rest of the day close to the hotel. It was a very odd feeling because we knew we would never be back in this place again. I knew how to get around the streets of Kourou better than I knew my way around my own state capital. I rather expected everybody to race out and try to see anything they'd missed before, but all of the regulars just lightened up and hung out at the bar at the hotel.

On Sunday, we flew home, hitting the runway at Dulles around four in the afternoon. I stayed that night with my friends Jacky and Steve in Chantilly. It was probably the most incongruent feeling of the whole Spacenet experience. It was just hours after the Foreign Legion and I had been shoo'd out of a seedy tropical bar at closing time on another continent, and now I was slipstreamed into middle-class American suburban life. One day it was martial law and soldiers and big ugly weapons, and the next I'm stuck in Beltway traffic on the

way to the supermarket. One day I'm watching a rocket tearing out of the jungle and thirty-six hours later we're making dinner reservations in Virginia.

It was almost like a warp in reality. I had just completed this transcendent experience and I couldn't find the words to explain it to my friends. Having lived as *etranger* long enough to grow comfortable, I now looked freshly at my native society. It was a short-lived enlightenment, largely burned off after a good meal, a long night's sleep and a hot shower. Still, for a few hours, I marveled at all of the silent assumptions and omissions that constitute our information-age lives.

Imagine: we take a shower every day but go to the store once a week. Doesn't anybody walk anywhere? We take the car down the driveway to get the mail! Looking at us as a newly-landed foreigner might, I realized that Washington was a lot scarier than Cayenne.