

LAUNCH magazine – Nov 2007
Yasniy, Siberia – Watching the launch

The small group on the hillock erupted into a chorus of awe when the rocket erupted in a fiery cloud on the western horizon. It looked as if the sun that was almost setting there had leaked a globule of flame that splashed downwards onto the line dividing sky and ground.

Initial shouts of “there-it-goes” were followed by a cascade of “oohs” and “aahs” and “wows” as the tiny flame soared high into the clear evening sky. And it was far enough away that at first there was no other sound at all except the gentle northerly breeze in the leaves of surrounding trees.

Well, that description fit all voices but one, actually – I was singing from a different sheet of music. “One-potato, two-potato, three-potato” was my admittedly discordant refrain. “Twenty-potato, twenty-one-potato,” I continued to chant as the rocket arced over into the high northern sky, its own voice still unheard by the crowd whose excited jabber continued as they craned their necks while sheltering their eyes from the glare of the low sun now on their left.

“Twenty-six-potato, twenty-seven-potato, twenty-eight-potato...” I droned on, under my breath so as not to attract the attention of some more inquisitive and perceptive members of the hill-top delegation. “Thir-...” I got to, then “Roar!” answered the rocket, its rolling thunder finally reaching us across the steppe like an acoustic horde of Tatar horsemen. “Roar-r-r-r ROAR” it powerfully persisted, only slowly dimming, a pang of cognitive dissonance between the sound coming straight from our left while the flame of the engine was now so clearly high in the center-right sky.

The surrounding voices reacted with exclamations of renewed amazement and delight. Again, marching to my own ever-more-distant space drummer, I was still out of step. I did a quick mental calculation. “Six miles, give or take,” I whispered to myself, and logged the time interval in my pocket notebook.

Later I would play back the tape recorded then still running in my shirt pocket to get a more precise time measurement [34 seconds, it turned out – my oral count was a tad slow], and then multiply by the speed of sound to get the actual distance. Together with the compass heading I had gotten of the pad’s radio tower earlier that day, when I climbed to the roof of our hotel (there were no signs on the fire escape, in English or Russian, saying not to), and with the degree of magnetic deviation on record for the airport we had flown into the day before, and with the exact latitude and longitude of the foreigners’ compound we were confined to, obtained by identifying the exact building on ‘Google Earth’, all combined they gave me a good hack on the launch pad’s precise location in the nuclear missile fields that covered this corner of southwestern Siberia.

When I got home to Texas I would compare the estimate to the precise latitude-longitudes of the several dozen nuclear-armed missile silos, data that the Russians had turned over to the US during nuclear weapons reduction talks in the mid-1990’s. I didn’t have those records with me, nor the Google Earth images of the facility I was now standing in front of.

The way I had figured, were they to be found in my luggage or on my laptop, during a security search I had every right to expect might occur, there would be too many awkward explanations to be made – perhaps unsuccessfully, to my embarrassment.

As it turned out, it was the pad designated “1-1” on the treaty documents. The measured latitude/longitude was 51.06° N, 59.71° E – unambiguously inside the zone my observations had prescribed.

Like everyone else I had been elated by the launch, for sure – I had been trying to arrange it through more than a year of delays and schedule conflicts. But for me it hadn't been the rocket itself so much – I'd seen Saturn-V's and space shuttles, Soyuzes and Atlases, and this 'Dnepr' vehicle was not anywhere near those classes of dazzle and gut-rattling thunder. Rather, the extraordinary new opportunity to peel back further the secrecy around the Russian space program, and share the results, was a delicious thrill. I realized for the umpteenth-potato time as we walked back from the hillock, the rocket now out of sight but flight status being announced periodically from a loudspeaker in front of the hotel, that “finding out” was still fun.