Peter Grogono

They had told me that I could easily miss the turn-off, but they were wrong. When you see a strip of blacktop, wide enough for a convoy of tanks and bounded on both sides by barbed wire, heading straight across an otherwise empty landscape with no apparent destination, it is a fairly safe assumption that the military has something to do with it. I duly turned off and eased my rented Japanese car up to a cautious fifty miles per hour. You never know who or what you might meet on a military highway.

The end of the so-called "cold war" had made it considerably easier to investigate certain aspects of the pervasive military presence. I was interested in "high tech" warfare in general, and the use of computers in particular. After much badgering, I had obtained an invitation to a defense site that had, until recently, been classified "top secret" but was now considered obsolete.

After a few miles of blacktop, I came to a gate, a guard house, and a large number of signs. Since several of these signs described the dire penalties that could be incurred by proceeding through the gate, I stopped. A man with a face vaguely reminiscent of a British bulldog was sitting at ease beside a building that could have been a large kennel. He closed the comic book he was reading and ambled towards me.

"The professor, right?" he asked.

"Right," I replied. It seemed as good a description as any, although it suggested that there might be a rather low density of my academic peers in the neighborhood.

"Aye dee," he said.

I reflected on this cryptic announcement for a moment and then opened my wallet and passed him my driver's license and university staff card. When he seemed to expect more, I gave him the assortment of plastic cards that various financial institutions had given to me in the hope that I would pay their absurd interest charges. He looked at the items carefully and then passed them back to me. Since he hadn't offered me his name, I decided that it should be "Cerberus".

"Come along, then," Cerberus said, ambling back towards his kennel. "You'll be going in with Ned," he called back over his shoulder. Hastily, I crammed the plastic back into my wallet and followed him to the kennel. Inside it, we faced each other across a small table.

"No metal," he said. I looked at him blankly.

"Coins, pens, keys, knives, automatic or semi-automatic weapons, ammunition, bombs, and missiles," he continued. It dawned on me that this was a list of the items that I was not supposed to have on my person when we went "in". I deposited two pens, three keys, and a handful of small coins on the table. I wondered whether to apologize for my lack of armaments, but chose discretion over valor.

Cerberus's next step was to wave a metal detector around me. All was well until he

approached my navel, at which point a number of red lights came on and a bell started to ring.

"Belt," he said. Catching on to his taciturn style, I removed my belt with its elaborate buckle of embossed brass. Even professors have some pride.

"But . . ." I began, wondering how to describe the imminent falling trouser syndrome. But Cerberus was ready for that, too. He handed me an ancient piece of string that appeared to have performed yeoman service in someone's tomato patch.

"Thank you," I said, securing my nether garment.

"You have to sign for it," This was an unexpected burst of loquacity, but I was ready for it: my mother had taught me never to sign anything without reading it first. I scrutinized the fine print for several minutes, finally convincing myself that my commitments were limited to the return of "Approx 1.647 metres, grade #2, heavy twine, garden for the use of (green), Part No. U-214-61749782, 07/09/57, Government Property, on-site use only. Classification: restricted". I signed the form and returned it to Cerberus, who threw it into a receptacle that looked rather like a garbage can. He beckoned me to follow him outside, presumably to meet the mysterious Ned.

Ned turned out to be an elderly and irritable horse. I looked at him and then sent an interrogative glance to Cerberus.

"No metal," Cerberus said. Of course, I realized. I can't take the car, because the car has metal in it, so it has to be a horse. I looked at Ned's hooves. They were shod with sturdy iron shoes. I looked at Cerberus. It seemed best not to argue.

"You ride?" asked Cerberus, although it was more a statement than a question.

"Yes," I replied. To demonstrate that I, too, could be a man of few words, I did not mention that I had ridden on a four-legged animal precisely once, that the animal in question had been an elephant in a zoo, and that I had been four years old at the time. "Where do I go?" I asked.

"Ned knows the way," Cerberus grunted, quite accurately, as it turned out. Ned appeared to know the way to every tuft of grass, thistle, and fresh puddle in the county. He was utterly impervious to the reins, my slaps, my kicks, and my plaintive suggestions that it was getting hot and that I didn't like thistles.

The sun seemed to become steadily hotter and I became steadily wearier and more uncomfortable. After a while, I began to wonder whether I would even survive the journey. It was not clear that Ned would. In fact, at the rate he was eating thistles, it seemed to me that he was in imminent danger of dying of over-indulgence. Eventually, however, we reached our destination. I consulted my watch: we had been traveling for a little less than seven minutes.

The entrance to the site itself was skilfully disguised. Perhaps only an expert tracker, or Ned, would ever have found it, but for the fact that close by it stood a fifteen foot pylon surmounted by an enormous and archaic television camera. To the accompaniment of whirring and clanking, the camera slowly rotated until it was pointing in our direction. I realized, for the first time in my life, just how Don Quixote would have felt if one of those windmills had turned and glared at him. A few seconds later, a substantial chunk of primeval desert floor slid to one side and two men emerged from the resulting hole. They looked at Ned and me and began to laugh.

"Do I look that funny?" I asked, wondering if perhaps they were not familiar with the

sight of tweedily-attired professors on horseback.

"Ned," said the shorter of the two men. "Good to see you. I thought they'd retired you years ago." He stroked Ned's mane affectionately and kissed him tenderly on the cheek. Then he started to laugh again.

"Oh my, I bet they did the whole number on you," said the other man. He pulled aside my jacket. "I don't believe it. Even the old string!" he whooped. I dismounted as elegantly as I could, brushed the dust off my clothes, and did my best to encourage a more serious attitude.

"I have come, by prior arrangement, to inspect your facilities and attend a demonstration," I announced formally.

"What is he, a plumber?" asked the tall man, and they both giggled again. Then the short man turned to me. He made a serious effort to look like a military officer, but his eyes did not stop twinkling.

"I am sorry," he said. "Life here is rather dull and we make the most of what little entertainment we can get. I am Alexander Alexandrovich Markov and this is Fred Nutkin. We are pleased to welcome you. Call me Sasha. Call him Fred."

"Hello, Sasha. Hello, Fred," I said, politely shaking their hands.

"If you are surprised that we belong to different armies," said Fred, "please bear in mind that open inspections are currently fashionable and there are both Russian and American service personnel working here."

But there was something wrong. Fred was tall and blond; Sasha was short and dark. Both fitted my stereotypical views of what Americans and Russians ought to look like. But Sasha wore the uniform of a US Army colonel, and Fred wore a colorful, though threadbare, Soviet uniform that appeared to be of comparable rank.

Sasha saw my puzzlement and hastened to explain. "I was born in the Bronx," he said. "My parents had the good sense to abandon Russia in 1916."

"I grew up in the Ukraine," said Fred. "'Fred' is an uncommon, but not unknown Russian given name, especially if your parents are a bit anglophilic. And '-in' is a common ending for Russian family names. Lenin . . ."

"Stalin," said Sasha.

"Bulganin," said Fred.

"Yeltsin," said Sasha. "Eugene Onegin," he added, introducing a modicum of culture into the politics.

"Scriabin. Borodin. Pushkin. Pudovkin." I said, to encourage the cultural tone. There was a silence while we tried to think of more Russian names ending in "-in". It was broken by Sasha.

"Well, don't just stand there," he said. "Come and see the gear."

We descended a few steps and entered a small cage. As the panel above us closed, I realized that the cage was a primitive elevator.

"About the horse," began Fred, as we descended.

"Ah, yes. The horse," said Sasha. "You see, when they got started here, back in the sixties, they did satellite tracking. With the equipment they had then, metal really *was* a problem, and they couldn't allow cars and trucks and stuff anywhere near the place. So they thought of horses. Back then, they had a whole fleet of them."

"Herd," I said.

"Eh?" said Fred.

"Of horses," I explained. "Herd of horses, fleet of ships."

"No, they didn't use ships," said Fred. "Too much metal. Besides, it's a desert."

"Anyway," continued Sasha. "They kept old Ned, and when some sucker—"

"Or professor," interjected Fred, glancing apologetically at me.

"—comes along," Sasha went on, "they do the 'no metal' shtick, and the string thing, and then they put the poor guy on the horse. It makes them feel important, you see."

I saw. I also saw that it helped to make the visiting sucker, or professor, feel a complete idiot. I checked that the string was still doing its duty.

"I cast my sop to Cerberus," I remarked, thinking it rather *'a propos*.

Fred and Sasha looked at me, mystified. I was about to embark on a lengthy explanation involving Virgil, Aeneas, a sibyl, the entrance to the underworld, a dog with three heads, and a cake flavored with honey and poppies, but we had already reached our destination.

"Oh, forget it," I said.

We stepped out of the elevator onto a raised platform at one side of a vast, dimly-lit cavern. The platform was crowded with ancient and bulky computing machinery. The opposite wall was filled by an illuminated map of the world. The North Pole was at the center of the map, with the United States on the left and the erstwhile Soviet Union on the right. The unfamiliar projection showed clearly that a missile which fell short would land in Canada, regardless of its political persuasion. Between us and the map, there were a couple of acres or so of consoles, each with a battery of keyboards, monitor screens, indicator light panels, and telephones. They were all deserted, and I hummed a bar or two of *What if they gave a war and nobody came?*

"This would be quite something if all those consoles were manned," I remarked.

Fred frowned. "We don't say 'manned' any more," he said. "It's not considered politically appropriate."

"It's not even politically *accurate*. We used to have a pretty good gender balance here," said Sasha, nostalgically. "Made for a good atmosphere, as long as there wasn't an actual war."

"But no one's actually worked at the consoles for years," Fred shook his head. "It doesn't matter much, because the computers make all the decisions anyway."

"You mean all those keyboards and switches don't do anything?" I asked, incredulously.

"Well, most of them do *something*," replied Fred. "For instance, if you push that button"— he pointed at a console about two hundred feet away—"a red light goes on over there"—he pointed at another console —"and that gets the guy there worried, so he or she pushes that button, and that turns some other light on, and so it goes."

"I see," I said, doubtfully.

"It makes them feel important," said Sasha. Feeling important must be a significant factor in military life, I thought. But it occurred to me that professors are no different: the military have their buttons, lights, and pieces of string; we have our students.

Sasha sat down on the floor and rummaged through a large cardboard box containing reels of tape.

"Apologies for the tapes," said Fred. "You were probably expecting CD-ROMs, or something fancy like that. But, although the military always gets the best, they have to go through these procurement protocols, so it's not always completely up to date."

"Not always completely up to date!" echoed Sasha. "If you're lucky, it's less than three generations behind Radio Shack. Ah! Here it is," he exclaimed, holding up a bulky spool. He stood up, rotated the spool until the twenty or so feet of tape that had come unwound were secure again, and passed it to me.

I read the label. It said: "W103-P-4773625. AL-3031-46Q. 1983-06-12. TD-763-941-3 only. It is strictly forbidden to play back, record, or erase this tape. Exclusive 617-7094-1X. TOP SECRET. Blue sausage". This was not particularly informative, although I did wonder about the usefulness of a tape that one was not allowed to play back, record, or erase.

"What does 'blue sausage' mean?" I asked.

"Trust a prof to spot the important part," replied Fred. "That's its name, see? If it didn't have a name, we'd never find it."

"You don't think we're going to remember all those numbers, do you?" asked Sasha.

"It's a rather curious name," I pointed out. "Does it have a deeper significance?"

They looked at me with puzzled expressions.

"Well, we couldn't very well call it *Doomsday, Part III*—" began Sasha.

"—or *The End Of Civilization As You Know It*—" continued Fred.

"—or *Teller Tells All*," concluded Sasha. "If we did that, someone might figure out what it was and steal it. It's security, you see," he went on. "There's not much you can teach us about security."

I agreed that trying to teach them about security would be a singularly pointless exercise, but felt it best not to say so aloud. Fred took the tape from me and walked over to an antique tape drive. I remarked that, for a visiting inspector, he seemed to be remarkably familiar with the operations of the site.

"Well, it was his job in Moscow, you see," Sasha explained. "To keep an eye on this place, I mean. He must have been pretty good at it—when I can't find something, Fred tells me where to look."

I noticed a hammer on the floor and picked it up.

"That's Sasha's," said Fred, walking back towards us. "He got it from a catalog."

"Yes," said Sasha. "I was looking through this supplies list and it said 'Hammer, \$650'. I couldn't image what a \$650 hammer would look like, and we had a budget back in those days, so I ordered it."

"Rather a lot for a hammer," I agreed, recalling the financial scandals that had plagued the military-industrial complex during the eighties.

"Well, it came with a free nail," said Sasha, defensively.

"Perhaps it was a \$3 hammer and a \$647 nail," suggested Fred.

"Have to be a good nail. Probably made of gallium arsenide—" suggested Sasha.

"—niobium-plated—"

"—mil-spec hardened—"

"and super-conducting at room temperature," concluded Fred.

"Do you still have it?" I asked.

"The nail? Nope. Probably fell between the cracks somewhere, like everything else around here," Sasha replied, sadly. "Let's run the tape. I should explain it first," he went on, suddenly brisk. "It's a scenario based on a projection to 1995 or so, assuming SDI goes ahead—"

"SDI is Star Wars," explained Fred.

- "I know," I replied.
- "— the Russkies catch up a bit—" continued Sasha.
- "Some hope," said Fred.
- "—the Cold War continues—"
- "Which it didn't," I said.
- "—a Hot War starts—"
- "Most unlikely," interjected Fred.
- "—and a fifteen million line program works perfectly the first time that it's used."
- "Never!" we all cried in unison.

"It's just a simulation." Sasha was smiling now. "One of the best, in my opinion. I'll start it, and we'll tell you what's happening as it goes along."

What happened was overwhelming. Lights flashed, bells rang, sirens wailed, the map lit up like Times Square on New Year's Eve. At the same time, the officers kept me fully informed, Sasha by yelling in my left ear, and Fred by shouting in my right.

"It's tee zero. Four ay emm gee emm tee," shouted Fred. "America's going to sleep and the Soviet's haven't woken up yet."

Before I had time to contemplate the sociological implications of this remarkable statement, Sasha was informing me of the next event. "That radar," he yelled, pointing at the map, "signals an alarm—"

- "—and it sends a 'request disconfirmation' to that other radar—" added Fred.
- "—which doesn't respond!" completed Sasha.
- "Why not?"

"Well, it was never actually built." Fred was deeply contemptuous. "Procurement protocol snafu."

"So the first radar doesn't get a disconfirmation acknowledgement and so it assumes that the attack is for real," Sasha jumped in. "That's called 'fail safe'."

"Hold on a minute," I interrupted. "Surely a 'fail safe' policy would lead to the inference that the attack warning was spurious?"

"You are *clearly* not familiar with military strategic planning techniques." Fred looked at Sasha for help.

"Think of it this way," said Sasha. "John Q. Taxpayer has forked out a trillion or so bucks to be defended. If he gets annihilated just because some radar that hasn't been built yet doesn't send a discom ack, he may feel that the money was not well spent. So our best policy is to figure it's for real."

"Or 'infer that the attack warning was genuine', as you would say," said Fred, in case I hadn't understood.

"Tee zero plus forty three seconds. The alarm reaches the joint chiefs," announced Sasha.

"They pick up the phone, call the guys on the other side, and they confirm." Fred was looking at the map, where yellow lights were appearing over Moscow and Washington.

"They confirm? Just like that?" My credulity was waning slightly.

"Of course. They've been waiting for this moment for years," Fred replied.

"But they've still gotta call the prez," Sasha went on. The yellow lights turned red.

"The prez isn't home but the veep is gung-ho and she says 'Fine, go right ahead'."

"She does?" I said, weakly. Was this what I went to the polls for? I began to understand the concept of mutual assured destruction—MAD. Completely mad.

"It's just a simulation," Sasha reminded, for the second time. A thousand or so white lights came on all over the continental United States. A few seconds later, another thousand came on in the USSR.

"There go the inter-continentals," cried Fred, in the offhand manner of a train-spotter at a railroad station.

"Tee zero plus one oh seven and now we get to the good bit," said Sasha. A couple hundred blue lights came on. "Those are the H-bomb powered X-ray lasers zapping the first wave of icy be-ums."

"But some get through!" cried Fred, as a wave of purple lights spread across the map. "There go the smart rocks!"

"A.k.a. brilliant pebbles," Sasha added enthusiastically.

"Why 'smart'?" I asked.

"To distinguish them from the joint chiefs, of course," replied Fred, grinning.

"Actually, it's because you don't have to aim them," Sasha explained. "Or something like that. Anyway, it's all done by the computers."

Fred seemed to be picking up some of the spirit of the battle. "Pow. Ka-boom," he said.

"Pow. Ka-boom," echoed Sasha.

"Pow. Ka-boom," I said, not wanting to feel left out. I had a sudden thought. "What about the decoys?"

"Decoys? Pow. Ka-boom," Sasha responded.

"Well, you know," I said. "Each missile is supposed to eject several hundred small metal objects to confuse the defensive launching systems."

They both stopped waving their arms and pow-kabooming and looked at me indignantly. "That wouldn't be fair," they said in unison.

"You see," said Sasha, with the air of a patient man accustomed to explaining the subtleties of professional warfare to ignorant civilians, "there are rules. And one of the rules—"

"A-112, paragraph 3, subsection 7(d)," Fred interjected.

"—states that decoys are *not allowed*. Decoys would make it too hard for the defense systems to handle. They might get confused. And then some of the missiles might get through."

"So there's all out war and mutually assured destruction," I said, "but you're not allowed to cheat?"

"Exactly." Fred's grin returned. "Think of John Q. again. If he's going to be annihilated, he's gonna want to be annihilated by genuinely superior military forces, not by some jerk who breaks the rules."

"Yes, quite," I agreed, although inwardly I thought that they were taking liberties with poor John Q.'s powers of reasoning.

"Tee zero plus one eight eight and a hundred per cent," announced Sasha. "A little over three minutes."

"A hundred per cent of what?" I asked.

"Zapped all the missiles." Fred pointed the monitor screen beside us. "This zero means no missiles got through, either side. This zero means no collateral damage, either side."

"Collateral damage?" I queried. "That's your jargon for dead civilians, isn't it?"

"Actually, it's all dead people, civvies and us, in this case." Sasha was more serious now. "That is, there were *no* deaths. Hundred per cent successful. Death is not good for PR."

Looking at the darkened map and at my new acquaintances, both shiny with perspiration, I had an uneasy thought. "Who won?" I asked.

"Who won?" they echoed in disbelief.

I explained my theory of warfare. "The purpose of war," I announced, "is to capture and retain the enemy's territory. At the termination of hostilities, the force that has made the greater gains is generally conceded to be the victor."

"Where have you been during the twentieth century?" Fred asked sarcastically. "A university, of course," he added, answering his own question.

"More to the point, what do you think we are?" asked Sasha. "The bloody cavalry?"

"No indeed," I replied. Ned had convinced me about that.

"You see," said Sasha, resuming his lecturing style, "it's like a kid with a toy train."

"Yes?" I said, sceptically.

"Listen. You're a kid and you've got a train. There's this other kid down the block and he's got a train too. One day, he comes round to your place to show you his new locomotive, and it's a great, long, fat, gleaming thing with a pointy end, looking like a . . . like a . . . "

"Missile," suggested Fred.

"Yeah, right, like a missile. So he's standing there with this great big missile. What do you wanna do?"

A little embarassed, I mumbled "Well, um, I guess, um, I'd . . . "

"Right!" Sasha shouted. "You'd want to stomp on it, right?"

"Pow. Ka-boom," added Fred.

That was actually not the action I'd had in mind, but I must confess that in the past I have encountered young male persons with the kind of inclination that Sasha was suggesting. I nodded lamely.

"And if you can't stomp on it, because you'd be punished, then whaddya do?" Sasha demanded. I had no reply.

"Well, you ask your dad for a bigger one. Right? Then *you've* got the biggest one on the block."

Although Fred hastened to assure me that the argument applied not only to locomotives, but also to tracks, wagons, and even ornamental pieces of toy scenery, I was not convinced. It seemed to me that the locomotives were an important part of Sasha's scenario. Especially the ones with pointy ends.

"So that's how it is in the military," resumed Sasha, calming down a little. "The other guy's got a big one. You've got two choices: either you stomp on it or you ask your daddy for a bigger one. But under no circumstances"—he lowered his voice dramatically—"do you start grabbing territory or killing people. Why not?" he concluded, fiercely.

"Because . . ." I said, feebly.

"Exactly. Because that would upset the man or woman in the street," explained Fred. "Especially John Q. After all, they pay for it, so you don't want to upset them."

We fell silent, contemplating the tragedy of the upset taxpayer.

"Well, thank you very much for the demo," I said, after a while.

"Yes, wasn't it wonderful?" Some of Sasha's earlier enthusiasm was returning.

"And they're going to close it down forever on Thursday at seventeen hundred hours," Tears appeared in the corners of Fred's eyes.

Sasha looked at him sympathetically. "It's hard on Fred," he said, softly. "You see, I can take the software home and run it on my kid's PC. Actually, it's even better on the PC—you get more colors." He looked wistfully at the enormous map. "I'll miss the big screen, though."

"Fred doesn't have a PC?"

"No kids. Wife. *Ergo*, no PC," he replied.

We thought about the difficulties of being a Russian. There didn't seem to be anything more to say. Sasha, brisk again, looked at his watch.

"Time to go," he said. "Come on. We'll take my chopper. Be faster than Ned."

I turned to say farewell to Fred. "Take care," I said to him, holding out my hand. He took my hand and came close to me.

"Take anything you like," he said in a husky whisper, "but, whatever you do, don't take Sasha's chopper."

I thanked him for the unexpected advice and hastened after Sasha, who was in an adjoining cavern gazing proudly at a rather decrepit helicopter.

"The one thing they let me keep after 'Nam," he said. "Seven hundred sorties. Under enemy fire more than three hundred times."

I believed him. The helicopter resembled a colander that had fought rhinoceros and lost. I tried to think of a polite way of declining Sasha's invitation. Inspiration came quickly.

"You can't fly it out of a cavern," I pointed out.

"No problem. Automatic roof," replied Sasha, promptly. He strode to the wall and threw a switch. Nothing happened. He looked crestfallen.

"I think I'd better take Ned," I said.

"Yes, I think you'd better," he replied in oa fost voice. We shook hands. His grip was firm, and his eyes still twinkled. "Horses are the one thing around here that still works properly."