

MURPHY'S LAST CALL

Short fiction reveals the complexity of orbital flight, the dangers of space

Casey Bisson, June 10, 2002 —

The Russians learned about this problem during the first few flights of their manned space program. Vostok 3 and Vostok 4, in August 1962, were to supposed to be orbital rendezvous flights¹. But as the cosmonauts of Vostok 4 accelerated toward Vostok 3, they found themselves actually drifting away.

What they eventually learned was that orbital rendezvous couldn't be figured out in orbit. Even today, shuttle missions to the International Space Station must be timed and 'aimed' perfectly. Breaking into orbit is relatively easy, changing orbits — overcoming the inertia of 100 tons of material moving at 18,000 miles per hour — takes more fuel or energy than the initial launch.

And that's why Allen Ferris in Derryl Murphy's *Last Call* is in trouble. He was lucky enough to survive the explosion of a nitrogen cylinder in his EVA suit, but

he isn't lucky enough to have an orbital lifeboat when that explosion sends him far from the space station he's working on.



Last Call, by Derryl Murphy. Available from eBook seller Fictionwise, < <http://www.fictionwise.com> >.

His colleagues on the station were anxious to chase after him in the shuttle docked there, but the NASA geeks — knowing a thing or two about orbital dynamics by now — shot that plan down.

And that's another problem poor Allen faces. The explosion sent him down (or at least slowed his orbit). Understanding that velocity, mass, and altitude are all interrelated; we can see that changing one variable without adjusting the others can make an orbit very unstable. In this case, everybody's pretty sure he'll become a shooting star.

Al is a little fickle about how he'd like to die, though. He assures his wife, via the phone patch put through as the spaceman's last rite, that he'll open his suit and kill himself before the barbeque. But, he asks that she tell their unborn daughter that he died in flames.

Nowhere in the story is there any mention of NASA staffers training their telescopes on the poor guy. Or, later, of a memorial hot dog roast held in his honor, but these are just a few points that would have made the story more entertaining. Or, not.

¹Russian Space Web's Chronology. Retrieved June 10, 2002 from the World Wide Web: <http://www.russianspaceweb.com/chronology.html>