

# Re: NASA HONORS LEGENDARY ASTRONAUT VANCE BRAND

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Jorge R. Frank wrote:

We are also way ahead of Russia in person-trips to space, 763 to 236 respectively. Which, not surprisingly, works out to about the same fatality rate.

If you go by that standard and not total flights flown. Does anyone have figures on the total man-hours in space for both the US and Russian programs? That divided by the crew losses might be an interesting yardstick also. The failure modes on both the Soyuz and Shuttle mean you probably get the whole crew back alive or lose everybody, barring death by natural causes or an EVA accident. As for the stations (ISS and Mir) you probably have a greater chance of losing some but not all of the crew, but if we wait around long enough we will get the meteor or space junk collision that blows a big enough hole for rapid depressurization.

As for life threatening situations on Mir, they had the fire, a near collision with a Progress, an actual collision with another Progress, The Soyuz thermal blanket shedding, and the big glycol leak. They had a lot of trouble with the orientation system and the air recycling system, but if worst came to worst, they could have always abandoned the station via the Soyuz, so those weren't life

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threatening.

Not in the case of the fire - it blocked the escape route to one of the two Soyuzes, stranding half the crew if the fire had been more serious.

I listed the fire as a life-threatening situation. Things like the computer quitting and the station losing sun-lock and power aren't life threatening. The fire and the collision were the two ones that the crew were lucky to survive.

And not in the case of the collision, either. According to the commander (Vasily Tsibliyev), the crew was unable to power up the Soyuz because its batteries were drained. Had the Progress collided with Kvant or the base module instead of Spektr, the crew would have died.

After the ISS debacle, I'm fairly sure we won't be getting too cozy with Russia for some time to come. Assuming we had gone it alone and built the Freedom station, I still think we would be trying to figure out what exactly to do with it as the whole thing was a reaction by Reagan to the Russians launching Mir,

Incorrect. The space station program was initiated in 1984, two years before the launch of Mir.

We knew full well the Soviets were going to build a multimodule station as their next step in space, as they were dropping hints to that effect all over the place, and a painting of a huge multimodule Soviet station

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was portrayed on page 46 of that that most Reaganesque of all books, "Soviet Military Power-1984":

[http://www.fas.org/irp/dia/product/84\\_46.jpg](http://www.fas.org/irp/dia/product/84_46.jpg) (I'll bet they wished they had the funding for this thing; it's made out of no less than \_twelve\_ Salyut modules attached to a new core module that looks like it takes two Proton launches alone to assemble.) Note the threatening thing hanging at the end of the collapsible truss structure extending from the top of the station. This widget is obviously something you want to keep at arm's length...maybe it's a nuclear-powered death ray of some sort. Whatever it is, the Pentagon isn't saying, but I think we should have upped the funding for our station by about a billion so we could have a bigger one of whatever it is on ours. The book says that "This station, which would serve military purposes, could appear as shown in this artist's depiction." and that's good enough for me. Also note the complete lack of any place for the Soyuz crew transfer and Progress cargo ships to dock, unless it's on the bottom of the core module; and considering that this thing looks like it might have a potential crew of at least twelve, they had better hope that they can get the Energia/Buran working pronto. By the 1985 SMP the thing had shrunk down considerably, and other than docking the TKS modules at the wrong end, one has to admit that the Pentagon had done a pretty good job of figuring it out:

[http://www.fas.org/irp/dia/product/85\\_59s.jpg](http://www.fas.org/irp/dia/product/85_59s.jpg)

The ever-shifting design of the station didn't get named Freedom until 1988- after Mir had been launched, and after Congress had already gotten a look at the price tag on NASA's early space station designs and had a collective heart seizure from the sticker shock. But we must not go to sleep by the light of a communist moon, nor even a giant square communist space station with some sort of a nuclearatomic telescoporadar thingamajiggy hanging on it.

Pat

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