

Random Notes on Leonov's Side of the Moon – for discussion with colleagues  
Jim Oberg (www.jamesoberg.com)  
August 12, 2005

Ramblings inspired by the book, “Two Sides of the Moon – Our Story of the Cold War Space Race”, by David Scott and Alexei Leonov, with Christine Toomey, Thomas Dunne Books, St. Martin's Press, New York, 2004.

Amazon.com discusses it here: [http://www.amazon.com/exec/obidos/tg/detail/-/0312308655/qid=1121809433/sr=1-1/ref=sr\\_1\\_1/103-9945457-2119828?v=glance&s=books](http://www.amazon.com/exec/obidos/tg/detail/-/0312308655/qid=1121809433/sr=1-1/ref=sr_1_1/103-9945457-2119828?v=glance&s=books). Numerous reader reviews, such as James Lampert, “I found the repeated references to Scott being barefoot by choice for much of his youth, while Leonov was barefoot by poverty for much of his, to be rather tiresome;” D. Sampson, “What I did not like about the book was the ghost writer's (Christine Toomey) propensity to write in such strong British language you'd swear Dave Scott was a bloke in an English pub instead of American fighter pilot/astronaut -- additionally, the ghost writer's total unfamiliarity with aviation came through in her writing, making some of tales told in the book rather silly and disappointing; ” Gary O.: “Each man is frank, easy to understand and allows his personality to show through his story.”

Other insightful reviews can be found at <http://whizzospace.com/blog/blog2004.htm>;  
<http://www.zone-sf.com/wordworks/2sidemoon.html>;  
[http://www.thealienonline.net/ao\\_060.asp?baa=1&tid=2&scid=21&iid=2457](http://www.thealienonline.net/ao_060.asp?baa=1&tid=2&scid=21&iid=2457);

These jottings don't cover all of the interesting things that Leonov wrote in the book, just some items that attracted my interest, amusement, or skepticism. Some items are also of interest to spaceflight historians and I collect them here for sharing. Other issues and puzzles are raised, about which I'm asking for insights from friends and colleagues.

Page 56, Bondarenko death – date is given as 5 March and as 23 March in two successive paragraphs. Alcohol-soaked pad hit electrical heating element. “Lived for four hours.” “The system of using an oxygen-rich environment in our spacecraft was abandoned in favor of regenerating oxygen through a system of filters – a much safer but more bulky process.” [JimO: What does THAT mean?]

Page 57, Bondarenko death – “The Soviet Union did not alert those in charge of the US space program to our tragedy.... What had happened to Bondarenko was considered an internal matter, not something we wanted openly discussed. Like nearly every aspect of our space program, it became a closely guarded secret.” [JimO: compare to the page 192 comments where he's mad at American spies for NOT seeing through the coverup]

Page 61: April 14, 1961 – he got back to Moscow the afternoon AFTER Gagarin's parade and Red Square fete [JimO: I thought pictures showed him in the crowd that morning?].

Page 79 – defends the enforced Korolyov anonymity and claims K himself approved of it, believing he might be assassinated by “enemies of the Soviet Union”. Also p. 144.

Page 86 – Nelyubov purge. Claims all four cosmonaut candidates resigned the very next day, based on a vote of the entire cosmonaut team. He doesn't mention how he himself was later shown photographs of the missing men (by Piet Smolders and by Arthur Clarke, inter alia), and had to make up false explanations of what happened to them.

Page 87 – Expelled cosmonaut Anikeyev later wound up in prison briefly in a false hit-and-run conviction.

Page 87 – Expelled cosmonaut Nelyubov was killed when hit by a plank protruding from a passing train. “Twice I went to visit his grave in the remote village” [JimO: I thought the grave is in Ramenskoye, SW of Moscow, a major aviation center, hardly ‘remote’]

Page 99 – Voskhod-2 – ‘Physical strain of training for an emergency like this was so great that the commander of the backup crew suffered a minor heart attack during training and had to be replaced.’ But no name given. -- Zaitsev or Gorbatko?

Page 101 – Voskhod-2 pre-launch preparations: “At the last moment I ordered most of this food to be replaced with extra ammunition for my pistol. Much better to carry more cartridges for self-defense, in case our spacecraft landed in an area with wild animals.” [JimO: I thought that the pistol was added to space missions only AFTER the Voskhod-2 flight; also, I doubt that a crewman would be allowed the latitude to remove food from the spacecraft, especially to replace it with explosive items].

Page 116 – After the off-course landing, Leonov recounts that he used a sextant “to determine our approximate location”. [JimO: I've never heard of any space mission carrying such heavy gear for such an unlikely and probably useless capability]. The narrative makes no mention of encountering wolves or bears or any hungry carnivores, although a rescue plane a few miles away reported buzzed a pack of wolves to chase them away from the landing site.

Page 122 – A few weeks after the mission, Leonov reports he and Belyayev met with NASA specialists posing as journalists, for many hours over several days, in the offices of a Soviet press agency – and the interviews were filmed. He wrote: “I do not believe that what NASA learned from us during those discussions was put in a drawer and forgotten. I believe the information we provided changed the course of America's next step in the space race.” But he admitted he didn't talk ‘much’ about the difficulties he had getting back in. [JimO: Was he being paranoid here, or was there really an American team, or even a NASA team, doing this? I've never heard of any results of this alleged meeting]

p. 192 – After Apollo fire: “But I was also very angry at how stubborn the American engineers were in continuing to use a pure oxygen atmosphere in their spacecraft. I couldn't understand why they had not switched to the system we adopted after the death

of Valentin Bondarenko – regenerating oxygen during a flight. The Americans must have known of the tragedy that had befallen Bondarenko. He had been given a big funeral, and the American intelligence services would not have been doing their job properly if they had not informed NASA about what had happened.” [JimO: Bondarenko’s funeral in Kharkov seems to have been a subdued affair and his gravestone described him only as a pilot – not for 25 years was it allowed to be changed to read, ‘pilot-cosmonaut’].

p. 253 – Zond-7 in August 1969 carried turtles and white mice, but on reentry “was a problem with the heat shield” and the animals died. This led to decision to cancel the circumlunar program. [JimO: Is he confusing this flight with an earlier failure, in late 1968?]

p. 260 ff, account of Salyut-1 in 1971.... P. 263, Leonov recounts that after he was replaced, and the new crew launched, he was sent ‘on vacation’ to the Black Sea coast for two weeks. [JimO: Isn’t the back-up crew usually intimately involved in ground communications and coordination during a mission? I can’t believe Leonov’s account that he was sent away ‘on vacation’}.

p. 263, Leonov writes, back from vacation, he talked with the Salyut crew and reminded them to pencil in a personal procedural change Leonov had developed for controlling the air vents in the Soyuz. “Make a note of it in your logbook,” he recalls radioing to them. “In my opinion this was the safest procedure,” he wrote. “It seems the crew did not follow my advice.” [JimO: I cannot believe that a cosmonaut had the authority to order a flight crew to change approved procedures, or that anyone else on that comm loop would have let him do it].

Page 264, he refers to cardiogram records that show Volkov died 80 seconds, Patsayev died 100 seconds, and Dobrovolskiy died 120 seconds after depressurization. He reports he flew to the landing site within three hours, and that although the bodies had been remained, “their blood-soaked seats ... were the only evidence of the tragedy.” [JimO: Would one expect serious bleeding after death by depressurization?]

Page 264 – “Not only was I deeply saddened by what had happened, but I was frustrated, too,” Leonov writes. “Had I been allowed to fly in their place I am sure my crew would have survived.” [JimO: This parallels Leonov’s earlier assertions that had he been aboard any of the Zond missions that failed, he would have been able to safely land them – pretty high level of self-confidence, seems to me.]

Page 264, Leonov added: “I never told anyone that the crew had failed to follow my instructions and that this had led directly to their deaths.” [JimO: What, he thinks his alleged radio conversation about the procedure was private and that nobody else was listening or recording it?]

Page 332, Leonov describes the next Salyut mission attempt, with him as commander of the crew. But in July 1972, the launch vehicle failed and within three minutes the Salyut crashed to Earth. From the crash site, a worker brought back some of Leonov’s pajamas,

found lying on the steppe. “But there was no raising my spirits – I was really beginning to lose faith in the program.”

Page 333, a few months after the January 1973 announcement of the US crew for ASTP, he was asked to command the Soyuz spacecraft. No mention of the OTHER Salyut failure, Kosmos-557, in May 1973 [it was in May that he elsewhere wrote he had been given the Soyuz command]. He preferred staying with the Salyut program.

Page 351: “In the beginning there was some aggravation between our two teams. I learned later that the Americans often complained that they were monitored the whole time they were in the Soviet Union. A lot of this paranoia was cultivated, I think, by the American intelligence services.” [JimO: I have some stories by Cernan and others in ‘Red Star in Orbit’ – worry about being monitored in the USSR was hardly ‘paranoia’]

Page 357 – ASTP mission description: “By the morning of 17 July it was time to move toward each other.” Actually, as he later admitted, the Apollo did the “toward” – Soyuz was a passive target. But he still repeated the mutual maneuvering imagery: “Eventually, the two spacecraft drew to within a few meters of each other... Our spacecraft were given the go-ahead to move together for final contact.” He also writes that Apollo was in a higher orbit than Soyuz, and lowered its orbit to increase speed to overtake Soyuz [JimO: all the profiles I’ve ever seen show Apollo in a trailing, lower over-taking orbit from the start]

Page 360, Leonov discusses a pilot error by Slayton during the second docking: “After seizure and during contact, Deke inadvertently fired one of the Apollo’s side roll thrusters, which had the effect of pushing both vehicles off center, folding them toward one another. There was a real threat of damaging the joint docking mechanism and the possibility of a catastrophic depressurization of our orbital module... We never spoke about the incident afterward. It would not have been very diplomatic for us to reveal how close Apollo had come to crippling Soyuz. We treated it as an internal affair. But we did receive an apology from Mission Control in Moscow for the mistake.”

Pages 365-6, refers to a post-flight incident in at the Kiev airport where a police motorcade stopped the departing crews and read a document honoring them. “When Americans saw live television footage of their astronauts being approached by the police and stopped, they immediately assumed they were being arrested... The hue and cry over the incident in the United States was just one example of the way in which good intent can be misinterpreted.” [JimO: The idea that such a scene was being broadcast ‘live’ on American television is incredible (the ceremony wasn’t THAT important) – and as for the alleged ‘hue and cry’, I recall not a peep – does anyone else?]

Page 367 – Leonov explains why joint missions weren’t continued: “Gerald Ford was defeated in elections by Jimmy Carter. Carter’s election campaign had heavily criticized Ford’s policy of détente, and it was not long before he cancelled all future cooperation in space.” [JimO: Carter a rapid Russia-hater? Hah – he was the guy who kept warning Americans to avoid “an inordinate fear of communism”, he was a mushy-headed soft-

hearted would-be peacemaker who kept being blindsided by one Soviet aggression after another in the late 1970s and became increasingly bewildered by it all....]

Page 370, Leonov discusses the declining Kremlin support for massive space budgets in the late 1980's. "I think [Gorbachev's] wife, Raisa, was partially responsible for this change in attitude. She had great influence over her husband. Though popular abroad, in her own country she was disliked by the majority, principally because she tactlessly tried to flag up her participation in every aspect of government. [She] was quite cold toward the cosmonaut corps. She seemed jealous of the attention we attracted. She wanted that attention for herself. She never established any contact with Valentina Tereshkova, for instance, whereas the wives of Khrushchev and Brezhnev had treated Tereshkova as a daughter." [JimO: So Leonov's complaint is that Raisa didn't kiss up to the cosmonauts like she should have? A revealing whine...]

Page 371, in 1991 Leonov was under consideration to become director of the Gagarin Cosmonaut Training Center (in 'Star City'). He was supported by the defense minister, Dmitriy Yazov, and the deputy chairman of the 'Defense Council', Oleg Baklanov. But then these men and others led the coup to depose Gorbachev and reestablish Soviet-style discipline in the country. The coup failed, and all their protégés – officers and officials closely associated with them – were under suspicion [Leonov does NOT provide ANY information of what he did or thought during the days of the abortive putsch]. "Shortly afterward I received the order that my military service, and with it all duties with the cosmonaut corps, was being terminated. I was given no warning. This was totally out of keeping with normal military protocol. I knew it was simply a matter of political intrigue... It was a stab in the back. I felt betrayed." [JimO: During the same period, the center director, cosmonaut Vladimir Shatalov, was ousted, but Leonov has no pity to spare for him or anyone else except himself].

Page 372: His verdict on Soviet power: "Under the old system of the USSR, power had been so concentrated that it did not allow the vast majority of its people to lead decent lives. The state apparatus was structured to impose limitations on the lives of ordinary citizens. Throughout the history of the Soviet Union my fellow countrymen had sacrificed themselves for the state. But the state did little for its citizens. As a result of my travels in other communist countries, I had long been convinced of the limitations of a one-party state." [JimO: So was it really such a good thing that the Apollo-Soyuz crewmen had agreed not to discuss politics?]

Page 372-3, his new work at Alfa Bank, interesting details.

Page 376, a VERY funny episode about Arthur Clarke. When '2010: Odyssey Two' was published, it had a Russian spaceship named after Leonov. The book was being serialized in a Russian youth magazine. "But halfway through the story the serialization was canceled" and Leonov was hauled before a political committee to explain his friendship for Clarke. They demanded to know how he had allowed "it" to happen, and Leonov answered that he had no idea what they were talking about. "The crew of the spaceship 'Alexei Leonov' consists of Soviet dissidents," they shrieked back at him in horror.

Clarke had mischievously used the names of about half a dozen Russians who were under prosecution or other repressions by the Soviet government. "Pettiness and lack of appreciation of true talent and creativity by certain Party members was one of the factors that crippled our system," Leonov later wrote.