

Oberg-Fobos-Nov30 – No Comm Progress, Europeans Ready to Quit Trying

From: James E Oberg Sent: Wednesday, November 30, 2011 9:26 AM

Subject: **Stranded Russian Mars probe -- no joy, and European rescuers losing patience**

Jim Oberg advises:

1. We could wake up any morning this week with startling news that the stranded Russian 'Fobos-Grunt' probe has suddenly come to life and moved into a higher, safer orbit. Or maybe not.

2. Here's a good overview: <http://www.spaceflightnow.com/news/n1111/29phobosgrunt/>
MSNBC's site has had stories from here: <http://www.space.com/13761->

3. A good comparison of the Russian problems with the NASA success is here:

<http://www.latimes.com/news/nationworld/world/la-fg-russia-space-20111129,0,2693984.story>

4. This last year's string of Russian space and missile disasters has become a big theme in the current election campaign, with the Communist Party accusing the Putin regime of allowing Soviet-era hi-tech industries to rot away. So worried is the Kremlin over the impact of these failures that a few days ago they cancelled a scheduled final 'volley-fire' test of the trouble-plagued 'Bulava' sub-launched missile [whose development is managed directly by the civilian 'Russian Space Agency', now headed by an active duty military general], reportedly out of fear that another failure would mean more opposition votes.

5. Here's the Mars probe news: Despite more than a week of intermittent radio contact with 'Fobos-Grunt', Russian flight controllers and their European would-be rescuers have so far failed to establish control over the probe's autopilot. As a result, all attempts to command a small engine firing to raise its dangerously-low orbital altitude, have failed.

6. The probe continues to slip closer to the atmosphere with a fiery reentry predicted for mid-January. Space officials proclaim there is no hazard, but in similar cases in the past [the Kosmos-954 plutonium over Canada, and the plutonium-carrying Mars-96 mission in 1996] officials had issued assurances that were deliberately false. See <http://www.jamesoberg.com/plutonium.html>

7. A deep source in the Euro Spa-Agency has advised me that patience there is running thin for Russian secrecy and apparent aimless blundering. ESA is considering terminating the extensive support tracking activities and returning their specialists to support of other on-going projects.

8. To protect this source, the following quotations cannot be used directly, but are provided only for deep background to serve as jumping-off points for further inquiries now under way. When the assertions are confirmed, we can be ready to go with a story.

9. [DELETED – subscribers only]

10. [DELETED – subscribers only]

11. [DELETED – subscribers only]

12. My view: Somewhere in ESA some grown-up MUST be arguing that it is imprudent at best, and crazy at worst, for them to relay unknown commands to somebody else's spacecraft carrying eleven tons of toxic, explosive chemicals, and with an insane autopilot to boot.

13. My contact cautioned me that official Moscow claims to have 'received readable telemetry' are doubtful. [DELETED – subscribers only]

14. He explained why European specialists have doubts. [DELETED – subscribers only]

15. The source did hold out some hope that the Maspolomas station in the Canary Islands, which has just been reconfigured to communicate with Fobos-Grunt, may have a geometrical viewing advantage over Perth. [DELETED – subscribers only]

16. So there is STILL a chance that engine-firing commands will reach the autopilot. What the computer DOES with the commands is literally anybody's guess.

17. In other news, amateurs have succeeded in imaging the satellite with telescope-cameras, discussed here: <http://forum.nasaspaceflight.com/index.php?topic=27289.msg834757>

You can scroll down to this image,

<http://forum.nasaspaceflight.com/index.php?action=dlattach;topic=27289.0;attach=341690;image>

which seems to show the solar panels properly deployed, confirming earlier rumors. Other sources have warned me to be cautious in interpreting these pictures which may show only camera jiggle, NOT real spacecraft structure.

18. Russian commentators continue to address the issue of underlying systemic weaknesses in the Russian space industry as a contributing factor to this most recent in a lamentably long string of recent space debacles.

19. Ex-cosmonaut Georgiy Grechko, a space engineer from the days of Sputnik who later made several space station missions, made these comments recently [wire story this morning]:

20. As for the official recklessness which chose to attempt their most ambitious-ever interplanetary mission after decades of stagnation, he was blunt: "We last launched such a sophisticated system some 25 years ago. Think what the 25 years mean for the space industry. A shift of generations occurred."

21. "What is our main trouble?" he asked. "The [federal space agency] Roscosmos chief spoke about it recently, although it is an open secret for specialists: the staff employed are either over 60 or under 30. There is no intermediate age group.... A generation was lost for the space industry, when it was struggling to survive."

22. "People, most of them young, energetic and talented, would seek higher earnings in other places," he continued. "The space industry could not offer them any decent salary. Incidentally, even now salaries are not high enough in the space industry, and they are sometimes below the average federal or regional levels."

23. An old photo of me with Grechko [at right] during a Houston visit is here:

<http://www.jamesoberg.com/image/jeo-grechko-severin.jpg>

24. Another Russian cultural trend is to blame foreign evil-doers for their own setbacks, and this mission is the opportunity for new accusations. Here's an overview of the crackpot theories:

http://www.theregister.co.uk/2011/11/28/phobos_grunt_conspiracy_theories/

25. Perspective on ground-to-space command problems: getting an orbiting vehicle to respond to ground commands has not always been a simple matter. An early unmanned test of a 'Soyuz capsule, called Kosmos-613, got into orbit in 1973 but then refused to respond to Earth commands -- and it took several WEEKS to finally figure out the problem. The very first International Space Station module, built in Russia, initially refused all commands -- but the Russians quickly succeeded, and then kept the problems from the US side:

<http://msnbc.msn.com/id/3541467/>