News Advisory (September 16, 2009)
James Oberg to media clients

1. In a major blow to Russia's rising ambitions in its invigorated space program, officials today reportedly decided to put off an extremely impressive Mars mission for two years. Russian press reports now confirm rumors that have recently appeared in the West.

2. The project, 'Phobos-Dirt' ('Fobos-Groont' in Russian) was to have been launched in mid-October, arrived in Martian orbit next year, land on the small moon Phobos, scoop up samples, and return to Earth. It's now off until December 2011 at the earliest.

3. This would have been one of the most significant science breakthroughs in the exploration of the solar system. The origin of Phobos is of scientific interest, but its material composition is of critical importance to using it for "on-site resource utilization', particularly water. The presence of extractable water there would make human visits much, much easier.

4. The project has been highlighted by Russian officials up to Putin as a symbol of the rebirth of the Russian space program and its push for superiority over the US program. This put enormous pressure on the designers of the probe.

5. Additional pressure came from a diplomatic gambit that allowed China to add a small subsatellite atop the Russian probe. China has been trumpeting that mission in recent months and this will be a major disappointment for them and a loss of face for the Russians.

6. Moscow wants to erase the memory of its last Mars probe, in 1996, that crashed back to Earth soon after launch. Although both Moscow and Washington officials insisted the probe's nuclear power units fell harmlessly into the deep Pacific, it soon became clear that they had landed in the Andes Mountains near the Chile-Bolivia border.

7. The pretense that they were somewhere else was convenient to diplomats, and no effort was ever made to find them -- or warn local inhabitants.

8. Despite early delays in testing and preparation, the Phobos probe's developers were working two shifts all summer with hopes of making the 'launch window' in October. Outside this period of a few weeks every two and a half years, the rocket energy needed to reach Mars was prohibitive.

9. Prudence has apparently finally won out over massive political pressure. A doomed mission with unverified hardware (and software -- which doomed an earlier mission to the moon Phobos in 1988) would have been far, far more damaging to Moscow's image than a delay -- which is damaging enough after all the bold promises and boasts.

10. There were more problems than just with the hardware. Major components of Russia's Deep Space tracking network were under extended repair and weren't expected to be ready. Also, scientists still had no reliable models of the Phobos soil interaction with the probe's drill and with its sampler scoop (soil jamming bedeviled NASA's recent Mars polar lander).

11. But this is sad news for spaceflight enthusiasts (myself included), who hoped this mission would succeed (there is NO similar US mission on the books) and provide critical information useful for long range space strategies.