

January 16
Jim Oberg advises:

1. Overnight there has been no clarification of actually WHERE the Russian probe Fobos-Grunt fell to Earth.
2. Although widespread media response yesterday was to accept the Russian claim of 'Pacific Ocean off the coast of Chile' at face value, even some Russians have begun backing off.
3. Associated Press latest report [1126gmt today]: "News agencies had cited Defense Ministry spokesman Alexei Zolotukhin as saying Sunday that fragments of the craft fell in the Pacific Ocean off Chile's coast. But Zolotukhin told The Associated Press Monday that estimate was based on calculations, and no witness reports had been received."
4. Precisely! Kudos to AP!! This is what I had described in my advisory yesterday afternoon [attached below]
6. On the other hand, officials at the Russian Space Agency [whose website had crashed this morning from overload of inquiries about the probe] have just 'doubled down' to assert that Zolotukhin's original claim [which even Zolotukhin is now waffling on] is the FINAL WORD.
7. "According to the Main Space Monitoring Center of the Aerospace Defense Command, the space probe fell finally into the Pacific Ocean at 9:45 p.m. Moscow time, as Roscosmos had predicted," Roscosmos said on its website on Monday, according to an Interfax report a few hours ago, confirmed at the actual website.
8. Meanwhile, the European Space Agency has remained mum, although their website promises an update 'shortly'.
http://www.esa.int/SPECIALS/Space_Debris/index.html
9. Actual tracking data from Pentagon infra-red missile-warning satellites has not been released, but in the case of the UARS fall last autumn, it took several days to do this.
10. 'Russia Today' news report – see link -- describes conflicting views.
<http://www.youtube.com/watch?v=L00xCooGyg4>
11. To add to the confusion, Federal Space Agency deputy head Anatoly Shilov told Rossiya-2, quoted in Interfax report of 08:05 gmt today, "The rover disintegrated at the altitude of ten kilometers above Brazil. That was the presumed location, so reports that the rover broke up there were a theory. There

is no visual or other confirmation to that because nobody watched the rover falling into pieces."

12. If the probe had fireballed in over Argentina or Brazil, it was near midday and there might not have been many visual reports, although sonic booms could have been heard. So far, no credible reports from those areas.

13. Still, when a country is told to 'look out for space junk', there's always a lot of junk already lying around that they 'find', so I expect that reports from Brazil will be almost all, if not 100% all, false positives -- unless the hardware is verified by NASA as from a space vehicle, which takes time.

14. An Interfax report at 06:05 gmt, in English, carefully described Zolotukhin's original words this way: "According to the estimated data of the Main Center for Space Reconnaissance of the Aerospace Defense Troops, the Phobos-Grunt fragments were to fall into the Pacific Ocean at 9:45 p.m. Moscow time."

15. This underscores the point that the original announcement was an expectation based on calculations, NOT a firm observation.

16. But even NY Times report this morning was carelessly worded: "Col. Aleksei Zolotukhin, a spokesman for Russia's Aerospace Defense Troops, told the Interfax news agency that the spacecraft, which broke up in the atmosphere, hit the water in fragments around 12:45 p.m. Eastern time." It did correctly attribute the claim to him, but misspoke about the certainty he intended to put into his claim.

17. There's no indication of any deliberate coverup here, from Russia or anybody else, just typical post-entry uncertainty and confusion.

18. But the possibility of debris on the ground -- including the American-built biocapsule -- cannot be ruled out, at all, so far.

Jim O

----- Original Message -----

From: [James E Oberg](#)

Sent: Sunday, January 15, 2012 4:10 PM

Subject: Russian space probe crashes -- but where?

Jim Oberg advises:

1. Russia's derelict space probe 'Fobos-Grunt' crashed to Earth today about 1 PM EST, as expected.

2. Also as expected, there remains serious doubt about exactly WHERE any pieces might have reached the ground. It's TOO SOON to assume they are 'safely in the ocean'.
3. Officially, Moscow announced the probe 'decayed' at 12:45PM EST, over the far south east Pacific Ocean off the coast of Chile.
4. Since the Russians have exactly ZERO space tracking sensors in that entire part of the world -- no radars, no ground optical sites, no satellites scanning the seas for infra-red signals -- the big question among informed observers is just HOW they knew the landing point.
5. A close reading of the carefully worded statement by Colonel Zolotukhin, spokesman for the Defense Ministry, provides some clues.
6. Unlike the way he was widely quoted in wire news stories, he did NOT state as a fact that the probe had landed at that time and location. And although other press releases claimed that the Russian control center was 'continuously' following the descent of the probe, an impossible tracking task, Zolotukhin did NOT repeat that claim.
7. The original Russian is quite clear: he stated that based upon calculations at the control center, the probe SHOULD HAVE landed at this point. YAHOO 'Babel Fish' puts it, "had to occur", NOT 'did occur'.
8. Here's the original Russian for anyone who wants to verify this:
"По расчетным данным Главного центра разведки космической обстановки Войск ВКО, падение фрагментов аппарата "Фобос-Грунт" должно было произойти в 21:45 мск в акватории Тихого океана"...
9. This CALCULATION -- not an instrumented OBSERVATION -- needs to be considered in context of claims over the past 48 hours that these same calculations showed the probe would land in the Pacific, then the Atlantic, then the Indian Ocean, then the Gobi Desert, and lastly again the Atlantic -- before concluded the the LAST calculation showed it "must have" landed in the Pacific even though nobody saw it.
10. Now, it did come down about that time, and more precise tracking from space-based Pentagon sensors will provide better information in the days ahead.
11. But there is now a large undercurrent of blogosphere and even mainstream Moscow press reports that the probe's remains came down a few minutes later [at 300 miles per minute], over Chile, Argentina, or most likely, Brazil.
12. It may even have come down, in the end, over the Pacific, where US space trackers were also expecting it to hit. But even then, fragments can get scattered far downstream, hundreds of miles or more. We'll see, and believe, when real data shows up.
13. So the chances of stuff dropping onto land remain undetermined, and possibly high.
14. This confusion -- and self-serving but unjustified assurances of 'nothing to worry about', is a vivid reminder of the LAST Russian Mars probe fiasco, in 1996. THAT probe was carrying

plutonium power packs for a Mars surface lander.

15. Right after launching, its trans-Mars injection stage malfunction [over Brazil, it turns out], and the probe separated automatically and tried to correct its course. Its own rocket firing knocked it out of orbit, and ground observers saw it fireballing across the Chile coast on the next pass, headed for the Andes Mountains.

16. Afterwards, the malfunctioning third stage was tracked for several days under the mistaken impression that the nuclear-powered probe was still attached. Worldwide alarms were sounded over where it might fall, organized by the Clinton White House's FEMA office.

17. When that vehicle fell into the Pacific Ocean, safely, the crisis was declared over.

18. Except -- nobody had seen the ACTUAL vehicle with the nuclear material falling out of orbit right back on the very first day of flight. And both Moscow and Washington political offices were happy to maintain the fiction that they had performed heroically in warding off the [non-existent] nuclear threat from the broken third stage.

19. The North American Aerospace Defense command, NORAD, later issued a clarifying press release about the REAL falling satellite with the nuclear material, and where it might have wound up. But that information was released at 5 PM on the Friday after Thanksgiving, quite by accident, we're supposed to believe.

20. In any case, such precedents are cautionary tales about too-quickly trusting any self-serving claims by ANY spacefaring nation, especially -- as in this case -- when the Russian claims seem to depend on non-existent tracking capabilities.