Sent: Tuesday, December 11, 2012 11:43 PM
Subject: North Korean satellite -- SUCCESS

0. Excellent MSNBC coverage here:
http://www.msnbc.msn.com/id/50167891/ns/technology_and_science-space/
1. North Korea's first successful satellite is now circling the Earth, the Pentagon's North American Aerospace Defense Command [NORAD] has confirmed. See
http://forum.nasaspaceflight.com/index.php?topic=2966.new
2. The confirmation followed the surprise launching of the rocket -- which observers had claimed was being dismounted from the launch pad to fix technical problems --at 0051 GMT Wednesday December 12. That's 9:51 AM Korea Time, and also 7:51 PM EST Tuesday evening.
3. By 0220 GMT, the official North Korean radio claimed a successful orbit, and shortly afterwards, NORAD issued its first orbital bulletin about the satellite, giving it the international designator "2012-72A", the 72nd orbital launch of this year, and the 'A' object [the payload]. Two other objects, 'B' and 'C', are also being tracked -- one the third stage, and the other perhaps a jettisoned camera cover.
4. The satellite is supposed to be transmitting on 470 MHz and if so, amateur shortwave listeners around the world can be expected to begin reporting the signal in the near future.
5, Back in North Korea, they will not be in radio range for about 12 hours after launch, because of the way the Earth's rotation carries the country out of the 'orbital plane' of the satellite but then back into it halfway through the first day in space.
6. This is the fourth known satellite launch attempt. The most recent, last April, was covered by an international press team of which NBC led the stories. We also had the outside world's ONLY scale model of the NorKorean rocket [now in my possession]. NorKoreans claim the first two launches were successful but nobody believes them.
7. For this launch, North Korea promised 'transparency' but again broke that promise by not showing the launch live, or even announcing its launch in a timely fashion.
8. This would have made any attempt to observe the launch from the west coast of South Korea pretty impossible. The rocket would have been visible as a moving, streaking light in the sky but hardly knock-your-eyes-out spectacular. To see it would have taken constant vigilance for several hours a day, over a period of many days.
9. Besides, North Korean official statements had given every indication that the launch was being delayed a significant period, due to technical problems. That now appears to have been a deliberate ruse to persuade would-be watchers they had more time to prepare and practice their observation attempts.
10. The launching appeared to have caught all observers quite by surprise.
11. Some garble was the result. The Japanese claim the rocket 'passed over Okinawa' was an exaggeration, since it passed almost precisely halfway between Okinawa and Taiwan:
see map http://www.northkoreatech.org/2012/03/21/exclusive-north-koreas-expected-rocket-trajectory/
12. Clearly the NorKorean rocket team learned from their problems in April. Even announcing that they were 'considering' a delay because of the late discovery of technical issues, was a strong indication that front-line experts had been granted more authority to hold up a launch if they had concerns.
13. Or maybe it was all a ruse because they knew we were looking for exactly that kind of maturity and program leadership improvement. Naaah, I don't think they have that level of sophistication for disinformation -- which might be naive on MY part. Let me ponder this.
14. The satellite is supposed to relay Earth surface photos, but it may take a week or two to calibrate its cameras.
15. Although NKorea could easily [and much more cheaply and quickly] obtained such imagery and other data from commercial satellite operators in other countries, I find it entirely plausible that their near-insane 'self-reliance' dogma ['ju-che'] led them make enormous efforts to accomplish the task on their own.
16. This is an additional motivation beyond the military value of such a rocket, both for domestic use and as an export commodity. They are only the tenth nation to have orbital flight with their own resources.
17. It remains possible that additional undisclosed payloads were aboard this rocket, such as a small test 'Reentry Vehicle' to be dropped off with the second stage near Luzon. That remains the last technological capability needed to weaponize the rocket. But if I had to guess, I'd say it's not likely.