

Sent: Monday, November 26, 2012 2:14 PM

Subject: yearlong space stay -- a step toward Obama space goal

1. NASA and Russia officially announced today that they will undertake a full yearlong orbital mission on the International Space Station in 2015. Current visits last 4 to 6 months. Launch date is currently set as March 30, with landing on March 16 the following year.
2. Planning for this step has been progressing for months and we've been following it closely.
3. This is a significant medical test for human endurance for interplanetary missions.
4. With political continuity now assured, the White House strategy of aiming for a near-Earth asteroid visit toward the end of this decade can move forward. This is a big step in that direction since such a mission would last about a year.
5. Selection of Kelly [the twin brother of Gabby Giffords' husband] was something of a surprise since several medical specialists were also considered candidates.
6. But Kelly's prime role is to be medical test subject, not researcher.
7. He also will need the psychological stamina for the endurance run, and it's long been felt in the astronaut corps that naval officers are much better suited to LONG space flights based on earthside experiences with long sea deployments.
8. The very first NASA astronaut crew for a space station mission, Skylab in 1973, consisted of three active-duty naval officers. And the first astronaut sent to Mir [1995] and the first to command the first long-term crew on the International Space Station likewise were naval officers.
9. This cultural domination has led inevitably to the adoption of naval terminology for hardware aboard space stations, such as 'galley', 'bulkhead', etc.
10. Russian cosmonauts have made flights of similar duration [max was 14 months] but their medical data has long been considered sketchy, even unreliable. Since the ISS is equipped with a modern medical research lab, this time it will be much better.

11. Russian doctors plan to compare flight results with their recently-concluded 500-day ground simulation of a 6-man international mission to Mars and back. They will restrict the crew to limited Earth contact and a very regimented diet in order to simulate psychological stresses of an interplanetary mission.

12. The announcement today comes amidst a flurry of other Russian space stories in Moscow

a. Announcement of a new cosmonaut class including a second woman-cosmonaut candidate

b. On-going firings and demotions over corruption in some branches of the space industry

c. Major policy announcements on reorganization and disciplining plans to counter a string of recent space failures

13. Not disclosed by NASA is whether or when the year-long flight will be repeated. Medical specialists always want MANY specimens exposed to new conditions, so that's likely to happen.

14. The 'stayover' nature of the flight [since the crew transport ships can only remain in space six months] means that there will be one or two 'short-term' flight opportunities halfway through the year-long experiment. Either a space tourist [Sarah Brightman, perhaps] or a professional medical specialist might be in either of those seats.

15. NASA has in the past been offered year-long tickets by the Russians, and turned them down.

16. I covered this for NBC a number of years ago, here: **"NASA mulls proposal for yearlong space stay"** <http://msnbc.msn.com/id/4603371/3/26/2004 11:06:08 AM ET> And "NASA says no to 12-month space mission" [4/19/2004 7:31:06 PM ET http://msnbc.msn.com/id/4779952/](http://msnbc.msn.com/id/4779952/)

17. From that article: "For now, methodical prudence appears to have trumped inspirational boldness. But the Russian offer has for the first time made NASA think seriously about longer-duration flights and the unavoidable fact that they must be done in the years to come. "

18. That time has come, and it's a good idea.