



## Technology Transfer Bulletin #A101-753B

# How to Poop Like an Astronaut

Many people ask, "Hey, just what the heck do WE get out of those billions of tax dollars that pour into the space program?" You might be surprised at the answer. Without the space program, you wouldn't have:

- Freeze-dried ice cream
- Moon rocks
- Ron Howard's impressive new movie, "Apollo 13"
- A big government complex named for Lyndon Johnson
- Lots of other neat stuff, just too numerous to list here

This series of NASA Technology Transfer Bulletins is, frankly, just another attempt by NASA to justify the incredible expense of the space program. We doubt anybody will ever actually read these bulletins, but we'll be able to wave a huge stack of them before Congress at the next Congressional Budget Review, so it looks like we're really doing some good here.

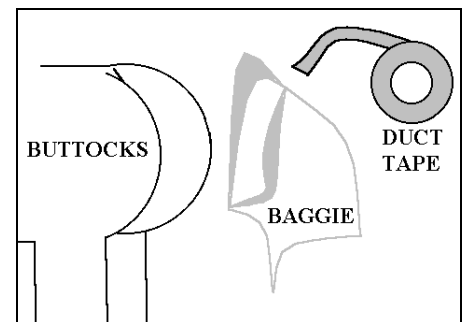
Anyway, this bulletin is about "How to Poop Like an Astronaut". Millions of your tax dollars have gone into researching this problem. Many people don't realize that pooping in space is really, really tough. Almost impossible, in fact. And it's not just because you're stuck in a tiny little compartment with several other people who are watching you intently, and getting it all on videotape for scientific study later. I mean, there's no gravity, so if you try to just have a regular toilet in there, all the poop just floats right out before you can flush. I don't have to tell you, that makes one HECK of a mess!

Not only that, you have to contend with Newton's Third Law, which is: "For every action, there is an equal and opposite reaction". Simply put, this means if you let loose a big one without some kind of restraining mechanism, you'll go flying right across the space module, probably upsetting some important experiment involving how bugs reproduce in space.

That's why there are no toilets in space modules. So how DO astronauts poop, you ask? Well, it's kind of gross, really. But you do what you have to, you know? Simply put, the process involves a baggie and some duct tape. (See Figure 1 below.)

## How to Poop Like an Astronaut in 9 Easy Steps

- Step #1:** Get a baggie and some duct tape.
- Step #2:** Put the mouth of the baggie up against your anus.
- Step #3:** Tape the baggie in place with some duct tape. Make sure you get a REALLY good seal!
- Step #4:** Poop. DO NOT PEE!! Peeing is covered in NASA Technology Transfer Bulletin #A101-753A.
- Step #5:** When you are done pooping, CAREFULLY remove the baggie from your butt.
- Step #6:** Wipe. Wiping is covered in NASA Technology Transfer Bulletin #A101-753C.
- Step #7:** CAREFULLY dispose of wiping material in baggie.
- Step #8:** Seal the baggie using the duct tape that held it to your butt.
- Step #9:** Dispose of the baggie in the nearest trash receptacle.



**Figure 1.**

That's it! Now if you are ever caught in a situation where you REALLY have to poop but, for some weird reason, can't use a toilet, you can Poop Like an Astronaut and everything will come out okay. And it's all thanks to your tax dollars, wisely spent on NASA space programs. While you're still feeling good, don't forget to write your Congressman and thank him or her for voting in favor of NASA appropriations!

*Note: All of this is actually true. I am not making this up.*