

ISP: Debris in space



By: Alex

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Space...

In the 1950s, before sputnik 1, space was an empty place. But as years passed, space had more and more things. Things like satellites. But space around earth was also home to space garbage.



1957

What exactly is space trash?

Can you guess?

It is mainly made up of dead satellites, also known as zombies. It also includes broken or spent rocket boosters and parts. Did you know that there is a wrench, a toothbrush, a glove, shaving cream, a camera, and a spatula were all in space? There are also nuts and bolts. They travel up to 17500 MPH!

How much?

- 2600 defunct satellites
- 10000 bigger than a monitor
- 20000 as large as an apple
- 500000 marble sized
- At least a million too small to be tracked



How did we find out?

Well, Donald Kessler first figured out the problem of space trash in 1978.

We can track space trash using radar, telescopes, lasers, and more.

We look at the debris with computers. Here is a link: [stuffinspace](#)

How do we avoid space debris?

People tracking this ... Debris ... alerts controllers of spacecraft if the spacecraft is about to be hit. If the spacecraft does get hit, the controller has a few choices. To replace it, to let it drift in space, to fix it, or get it back to earth. O YEA, and the ISS almost got hit in 2013, and they couldn't move away, so they went into a soyuz spacecraft. We track space debris hitting the ISS using something called the pizza box.



So, should we collect space debris?

As this has been becoming a problem, people had many ideas to clean this up. But the more we do this, the more we create this debris. Take this video.

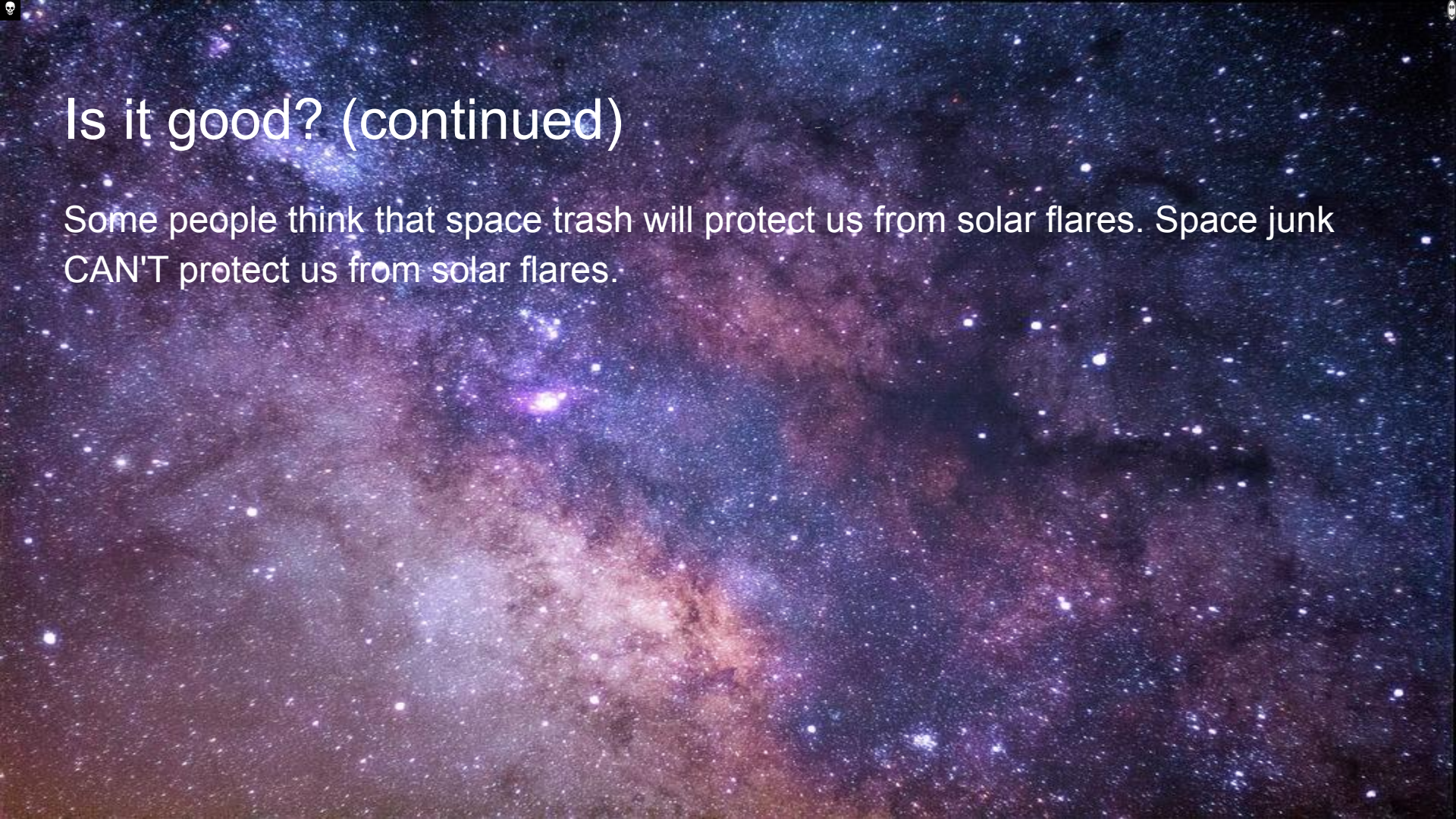
end of space 6:53

Is this good?

Well, the US military did something so you can communicate with people across the world it was called project westford. They launched 480000000 copper needles into space to make the world better. But the debris creates a chain. It explodes a satellite, which turns into more debris, which explodes another, and another, and another, and another, and another, until there is nothing left. So, mostly, from what I see, this is not too good.

Is it good? (continued)

Some people think that space trash will protect us from solar flares. Space junk CAN'T protect us from solar flares.



Iridium was still operating,
while kosmos was dead.

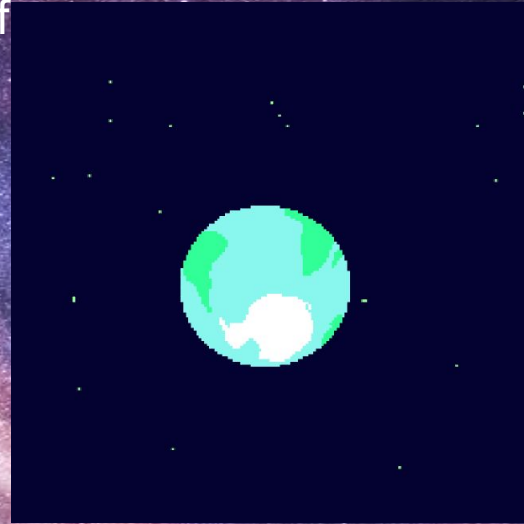
The impact was horrible.



Is it bad? (continued)

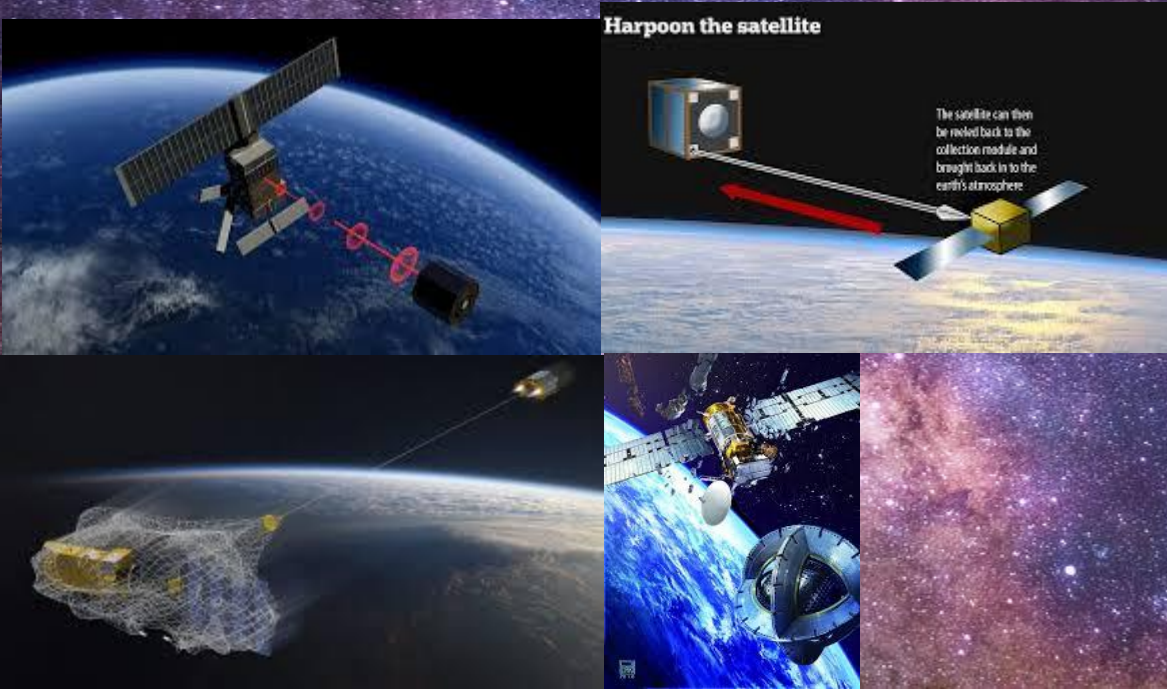
If we don't clean up, earth will be a junkyard. Mostly LEO. earth will be a trap and LEO will be impossible to use. And if happens, we will be doomed, as we can't escape.

No moon or mars base...



Solutions

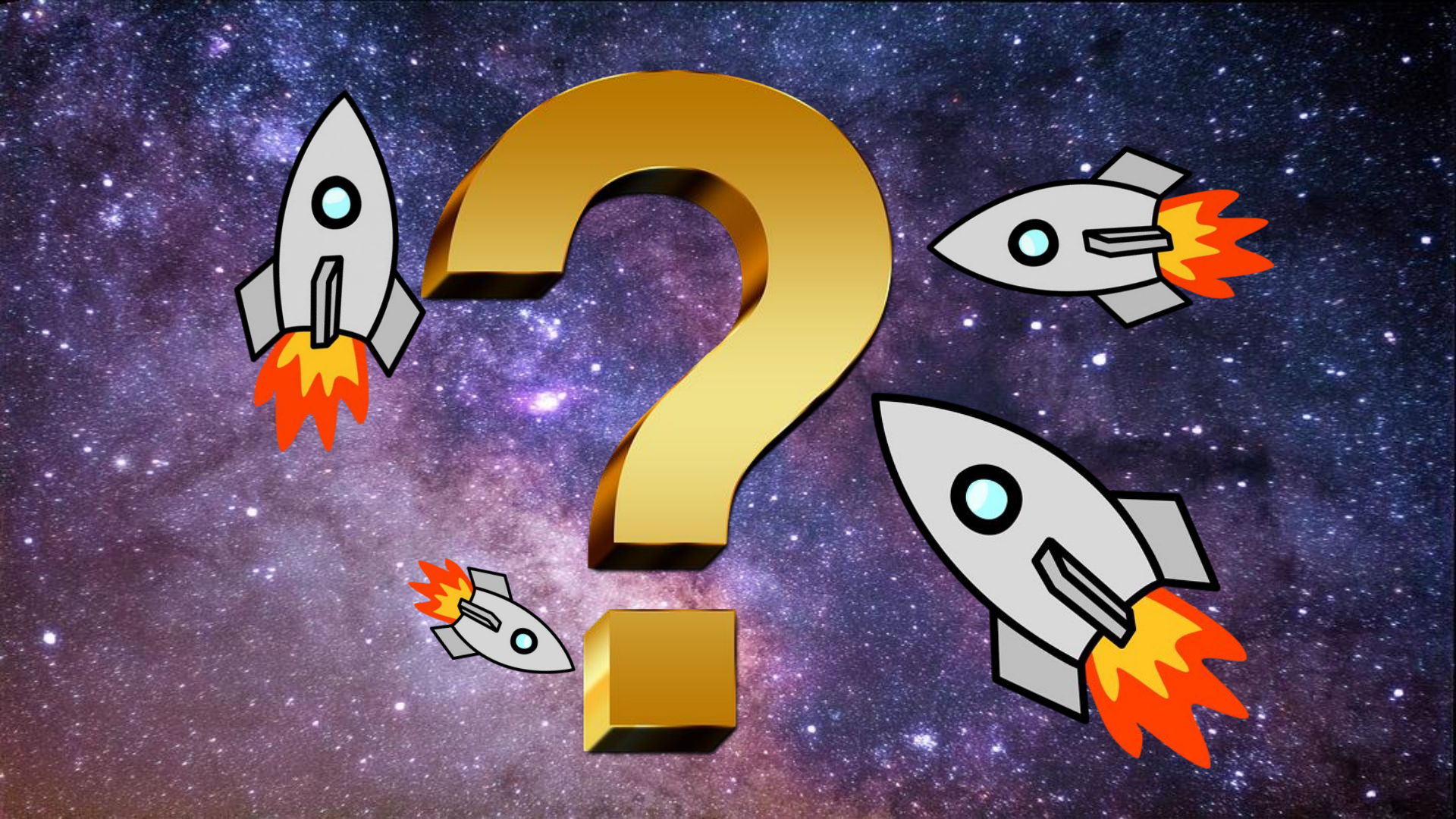
Do you have a way to clean?



Magnets should be more reliable, as others make contact and lasers could accidentally explode other things instead of burning.,

Opinion

Well, even though the more we try, the more debris we make, I think we should clean up after ourselves. I like space and I don't wanna ruin it. We still have a lot to explore!





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