

Wolf Richter: Oops, SpaceX to Lay Off 10% of its Employees after Funding Fiasco in November

By Wolf Richter, a San Francisco based executive, entrepreneur, start up specialist, and author, with extensive international work experience. [Originally published at Wolf Street](#)

What SpaceX is trying to do has “bankrupted other organizations,” it said.

SpaceX, the unicorn startup with a newly minted \$30.5 billion “valuation” and dreams of sending humans to Mars shortly, will lay off about 10% of its employees, “a person familiar with the matter” told the [Los Angeles Times](#) on Friday.

The company says on its website that it has “6,000+” employees. [TechCrunch](#) reported that SpaceX “employed at least 7,000 people in late 2017 when COO Gwynne Shotwell last gave a number.” So somewhere between 600 and 700 employees will be out of a job. The Times reached out to SpaceX for comment, and this is how the company responded in perfect corporate-hype speak (bold added):

“To continue delivering for our customers and to succeed in **developing interplanetary spacecraft** and a **global space-**

based Internet, SpaceX must become a **leaner company**.

Either of these developments, even when attempted separately, have bankrupted other organizations. This means we must part ways with some talented and hardworking members of our team.”

And note the phrase, “...have bankrupted other organizations.” So how serious is this getting?

This reflects perhaps the money-raising fiasco SpaceX smacked into in November. SpaceX had tried to raise \$750 million by issuing a leveraged loan. The leveraged loan market was red hot until October, and anything would go. But this era ended. By November, investors were getting jittery about leveraged loans. And in December, the [leveraged loan market came unglued](#).

SpaceX will need many billions of dollars over the next few years not only to launch commercial and government satellites, but also to fulfill its dreams, including sending cargo to Mars by 2022 and humans by 2024, or whatever.

It marketed that \$750 million leveraged loan only to a select group of investors, and they had no appetite for a risky loan of this magnitude. And here’s why, according to the [Wall Street Journal](#) at the time:

Some investors who were offered the loan expressed misgivings about the company’s record of burning through cash and its experience with high-profile accidents, which have previously led to dips in revenue. Other concerns include the company’s large investment plans and its connection to Mr. Musk, the founder and chief executive of

SpaceX, whose volatile behavior has led to turmoil at the electric-car maker Tesla Inc., where he also is chief executive.

With that fiasco under the belt, and needing more cash to burn through, SpaceX tried in December to make up the difference by selling \$500 million in equity, “to help get its internet-service business off the ground, according to people familiar with the fundraising,” the [Wall Street Journal](#) reported at the time.

SpaceX has not yet announced if it actually received the equity funding. In total, including the downsized leveraged loan and the December equity funding, if or when it goes through, SpaceX will have raised \$2.7 billion.

To those of its employees who are now getting laid off, the company is offering a minimum of eight weeks’ severance pay along with other benefits and assistance, such as career coaching, according to an email sent Friday to employees by COO Shotwell, cited by the Times.

SpaceX launched 21 satellites in 2018 and 18 the year before. It has contracts with NASA to deliver cargo to the International Space Station and develop a capsule to send humans up there. The first unmanned test flight of the capsule is schedule for next month (NASA used to do that sort of thing itself in the 1960s).

The loan debacle SpaceX ran into in November is the beginning of a broader symptom: The rising difficulties for cash-burning companies to obtain new funds to burn through, after an era when just about anything went.

This is another piece of the puzzle of those “financial conditions” in the markets that the Fed has been discussing for a while. It

was trying for three years via its monetary policy to tighten the ultra loosey-goosey financial conditions that resulted from years of QE and zero-interest-rate policy. And suddenly, starting in October the financial conditions in the markets tightened as investors became a tad more aware of risks.

When companies have trouble funding their cash-burn operations as financial conditions tighten, the next step is to be more prudent with their expenses and to try to reduce their cash burn so that they can hang on under these tighter financial conditions. And perhaps that's what we're seeing at work here.

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This entry was posted in [Auto industry](#), [Banana republic](#), [Investment outlook](#), [Ridiculously obvious scams](#) on [January 13, 2019](#) by [Jerri-Lynn Scofield](#).

1. ***The Rev Kev*** [January 13, 2019 at 8:59 am](#)

I'm calling shenanigans on SpaceX and say now that they had no real intention of ever going to Mars. A typical neoliberal company in thought and deed. They saw a government activity – launching satellites into space – and decided to move in to take it over for their own profit. I would be curious to know how many government subsidies they took which helped them in this goal. They used money raised to hire away talent from NASA to use against them as well as a bunch of stary-eyed idealists. They say that they want to go to Mars but I say that that is just a publicity gimmick to draw in more people. Their real business is to try to corner the market on launching satellites into orbit and turn it into a death grip. Probably find down the track they will go for more subsidies to undercut foreign satellite

companies which would suit the US government just fine. I would guess that the ones being let go would be more to do with the division working on the “Mars venture” while they concentrate their resources on their real business – launching satellites.

[Reply](#) ↓

1. **PlutoniumKun** [January 13, 2019 at 9:08 am](#)

You could argue that the problem with SpaceX is that its not neoliberal enough. Its crippled by all Musks crazy space exploration dreams, which he shares with many silicone valley types – the core SpaceX product (medium heavy launchers) is top class – its all the other stuff thats wasting money. This is the one subject they don't apply profit and loss calculations to.

I doubt very much if SpaceX could ever corner any market in space travel, its strategically too important to too many countries, so there will always be competitors from Russia, China, Europe, India and maybe other countries too in the next few years. Its possible of course that he could intend to corner the US government market, but even that would be difficult given the power of the existing industry.

[Reply](#) ↓

1. **NotTimothyGeithner** [January 13, 2019 at 9:19 am](#)

Without Mars, I don't know if SpaceX would be seen as sexy enough to attract neoliberal investors, who think vending machines and apps are revolutionary with a good enough Ted Talk.

[Reply](#) ↓

2. **tegnost** [January 13, 2019 at 9:13 am](#)

stary eyed idealists for the win

[Reply](#) ↓

3. **XXYY** [January 13, 2019 at 11:04 am](#)

Can we all just agree now that a manned mission to Mars is a completely ridiculous and impossible idea, doubly so if the goal is to have the people return to Earth.

Just consider the basic numbers. It costs about \$10,000/lb to put things into Earth orbit. Mars is between 100 and 1000 times as far away as the Moon (depending on planetary alignment), so putting a gigantic payload *on Mars* is going to require a substantial craft with many tons of fuel that will itself need to be boosted into Earth orbit at a cost of \$10,000/lb. Because of the way the planets rotate, there is only a favorable time to transit between Earth and Mars every 2 years, so the minimum length of a Mars mission is 2 years.

So. From Earth, we will need to orbit (a) a trans-planetary spacecraft, (b) fuel for that craft to power it both to and from Mars, (c) a human crew, (d) 2 years of oxygen, food and water for that crew, and (e) sufficient structures and supplies for the crew to live for 2 years in a place that has absolutely no natural resources, not even air or water (recall in the US moon missions the astronauts were on-planet for a few days at most). Just

from a cost perspective, this will take the combined GDP of many countries and need hundreds of launches from the surface of the Earth just to position things for the start of the trip.

There are also terrible technical issues with landing on Mars (which lacks enough atmosphere for a parachute to do much), and with assembling and fueling a gigantic interplanetary return-trip spacecraft in the surface of Mars. Mars has no infrastructure whatever, not even a tree to swing a rope over, so the idea of doing heavy vehicle assembly work on Mars, or *any* kind of assembly work, is facially absurd. The “industrial base” will consist of whatever humans can lift with their arms while wearing a spacesuit, breathing imported oxygen.

One can go on and on, but there is no need. The whole mission, even leaving aside the pointlessness of visiting a barren and utterly hostile world and the great likelihood of death for the participants, makes no sense whatsoever and is strictly a fantasy for people who haven't spent 5 minutes thinking about it.

In other words, a perfect Musk proposal!

[Reply](#) ↓

1. **Michael** [January 13, 2019 at 11:25 am](#)

You forgot the facts that anyone going to Mars would be blind and have cancer by the time they got there. Oops!

[Reply](#) ↓

1. **Oh** [January 13, 2019 at 1:32 pm](#)

Another reason for us to send Musk, Bezos and a whole bunch of politicians on the maiden flight! SpaceX is another scheme to suck on the public teat. Viva corporate welfare!

[Reply](#) ↓

2. **ambrit** [January 13, 2019 at 2:12 pm](#)

Bollocks! The Mars Direct group figured the mechanics of cheap and 'easy' Mars trips years ago.

See: https://en.wikipedia.org/wiki/Mars_Direct

First, Mars gravity well is 'lighter' than Earth's. Returning from the Martian surface to orbit won't be as hard as from here to Low Earth Orbit. (LEO, the base for all else in our vicinity.)

Second, Mars has lots of water! Water can be 'cracked' quite easily and cheaply to supply both oxygen, (your reactive part of a breathable atmosphere,) and hydrogen, (one half of the most basic fuel needed, and already technically feasible.)

Third, if you have to build political support by utilizing some of the Battlestar Mars methodology, the Moon also has water, though much more difficult to gain access to. Your basic fuel and atmosphere materials can be got there at much cheaper rates.

Fourth, all the radiation problems have work arounds. Cost is the biggest draw back. Radiation shielding adds weight and complexity to your spacecraft.

Fifth, on Mars, the 'pioneers' will have to spend much of their time in underground facilities anyway. A foot or more of good old Martian red dirt does wonders for stopping those pesky energetic particles.

Sixth, the return craft will not land on Mars. It will be left in orbit, say tethered to one of the two "moons" of Mars. In the second generation deep space craft, the engineering enters a different field. Light weight construction methods.

Seventh, humans need some frontier to aspire to, even if the individual doesn't have a realistic chance of going there. The psychological value of aspiration, even though presently misused for socio-political ends, is positive.

Some of us have spent more than five minutes thinking about this and have come away with the conviction that it is necessary for the species continued health and well being.

[Reply](#) ↓

2. **kimyo** [January 13, 2019 at 9:00 am](#)

current technology will not allow humans to visit mars. [What is the Temperature of Mars?](#)

On average, the temperature on Mars is about minus 80 degrees Fahrenheit (minus 60 degrees Celsius). A summer day on Mars may get up to 70 degrees F (20 degrees C) near the equator, but at night the temperature can plummet to about minus 100 degrees F (minus 73 C).

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1. **Octopii** [January 13, 2019 at 10:46 am](#)

Is this the flat earth society here? Men visited the moon almost fifty years ago and it's not too hospitable either.

[Reply](#) ↓

1. **kimyo** [January 13, 2019 at 11:15 am](#)

is the following a plausible scenario? what materials will the habitat be built from? how will it be heated?

[elon musk \(sept 2017\)](#)

"In 2024 we want to try to fly four ships [to Mars]. Two cargo and two crew. The goal of these initial missions is to find the best source of water, that's for the first mission, and then the second mission, the goal is to build the propellant plant. So we should, particular with six ships there, have plenty of landed mass to construct the propellant depot, which will consist of a large array of solar panels, a very large array, and then everything necessary to mine and refine water, and then draw the CO2 out of the atmosphere, and then create and store deep-cryo CH4 and O2."

[Reply](#) ↓

1. **Octopii** [January 13, 2019 at 12:33 pm](#)

I don't have the background to assess that plan, and I doubt anyone in this discussion does. I

certainly have no informed reason to trash talk it.

[Reply](#) ↓

2. **ambrit** [January 13, 2019 at 2:25 pm](#)

It looks like Musk is appropriating parts of the Mars Direct proposal.

See above for a Mars Direct link.

It is all technically feasible. What are needed are the necessary resources allocated. (Cost.)

Once a usable source of water is found, the rest falls into place.

There is no reason why the 'pioneers' won't become literal pioneers and stay on Mars. (The Commentariat's preferred outcome for Musk et. al.)

[Reply](#) ↓

1. **cj51** [January 13, 2019 at 5:07 pm](#)

Some people at MIT don't think it will be that easy for people to stay on Mars:

<https://www.iflscience.com/space/mars-one-torn-shreds-mit-debate/>

[Reply](#) ↓

2. **Greg** [January 13, 2019 at 5:08 pm](#)

It's interesting that the SpaceX timeline isn't too far off the Red Mars timeline from Kim Stanley-Robinson's epic martian series back

in the early 90s. You know, when Musk etc were young and impressionable :)

Anyway, the flip-side of that is that the Mars Trilogy has the first pioneers on a one way trip with certain death from rad exposure and a bunch of other fun side effects. They still went. The first fifty to a hundred years of humans on mars is life-dependent on regular cargo shipments from home (think 40ft containers dropped from space that cost megabucks to send from a disintegrating global economy drowning in climate failure and you'll see some of the problems with that approach).

So

https://en.wikipedia.org/wiki/Mars_trilogy.

probably source material, remarkably prescient but that's a bit chicken/egg I think.

[Reply](#) ↓

3. **FreeMarketApologist** [January 13, 2019 at 9:12 am](#)

"...SpaceX tried in December to make up the difference by selling \$500 million in equity, "to help get its internet-service business off the ground,..."

Here we have a company that hasn't been profitable doing the thing they were set up to do, and now they're trying to justify that work by implementing space-based internet connectivity, which coincidentally requires another 10,000+

things to be launched into space. This would nearly triple the number of satellites in orbit (about 4900 as of Nov 2018), and add significantly to the space junk problem.

I'm all for continued space exploration, but at this point it seems like the company is simply flailing about trying to justify sucking money out of wealthy investors.

[Reply](#) ↓

1. **tegnost** [January 13, 2019 at 9:24 am](#)

Speaking of excess junk, I know this story was in links today, but now teslas are going to follow their owners around "like pets" so add this to guillotine watch, annoying tesla traffic jams at the front door to all the stores, or "let's take a walk down main st, come along tessie!" A car that follows you around is self driving and the reg pushback is probably the lack of a licensed driver. Whose fault is it going to be when it hits something? This should make the urban areas clogged with uber/lyfts just that much worse. What a stupid world they are making. Musk really should inhale more weed and go ride a bike.

[Reply](#) ↓

1. **The Rev Kev** [January 13, 2019 at 9:36 am](#)

What happens when the next Timothy McVeigh loads up his 'tessie' with explosives and orders it to drive into some building while he is making his getaway?

[Reply](#) ↓

4. **ambrit** [January 13, 2019 at 10:11 am](#)

This points out the basic constraints on the “private” sector in gigantic projects. Some endeavours require the resources of an entire population to carry out. The Manhattan Project could not have been carried through by even a consortium of ‘private’ companies in the time scale require by the conditions; a war and a depression. Assembling the brainpower needed required the coercive power of the government. It is telling that Space-X is purported to have hired away boffins from NASA. Those Brainiacs were nurtured and developed by State funded schools and universities. They were given the opportunities to develop their gifts through State funded programs. See DARPA for an example of that.

This retrenchment at Space-X is a sign that that entity has realized that it, suffering from the limitations imposed on it by the “private” sector, cannot be run as a Project, but must content itself with existing within the constraints of being a Business.

[Reply](#) ↓

1. **Brooklin Bridge** [January 13, 2019 at 2:25 pm](#)

Agreed. It would probably be cheaper and safer and faster to simply give the development back to NASA and just pay Musk to take photos of himself looking out a port window of a rocket.

I lost track of why NASA had to give up these projects in the first place. Is it such revulsion for government that we can no longer feel proud of our flag unless it's flown

by private industry? Is it just one more avenue for funneling large amounts of cash into the hands of our most needy politicians to sustain their Dorian Grey pictures of what they really look like well locked up? Or is it to illustrate that in a meritocracy (ahem...), like ours, people that can hop in their own space ships really are worth 1000 times more than us beasts of burden?

[Reply](#) ↓

1. **ambrit** [January 13, 2019 at 3:11 pm](#)

I like your locution; "...a meritocracy, like ours..." The false equivalency inherent in the Neo-liberal myth of the "rugged individualist" is plain. All those 'big business' "successes" are built upon Government funded and run 'pure science' programs. The Internet itself, fecund source of fortunes large and small was the direct outgrowth of a network established among government and university departments to facilitate the communications of scientists. Who here remembers the Arpanet? All Bezos and his ilk did was to carry out a modern enclosure movement upon what had been a public trust. Behind every great fortune lies a great crime.

In the proverbial "Just Society" criminals like the billionaire class would pay for their transgressions. We have the dishonour to be living in a corrupt and degenerate age. Thus, criminals are lauded. The rest of us, well.....

[Reply](#) ↓

5. **bob** [January 13, 2019 at 2:50 pm](#)

Musk is-

- 1) a banker (paypal/ebay)**
- 2) A defense contractor (spaceX)**

He uses these two entities to fund gifts of shitty cars to giant, insufferable assholes.