

# **Impacts from rocket launches to the ocean environment**

November 17, 2023

California Coastal Commission

## Launch update:

The FAA cleared SpaceX for launch for today, Friday, Nov. 17, 2023 for a second test of the SuperHeavy rocket from Boca Chica, Texas. SpaceX may also launch rockets from Vandenberg and Florida today.



A REUTERS INVESTIGATION

# At SpaceX, worker injuries soar in Elon Musk's rush to Mars

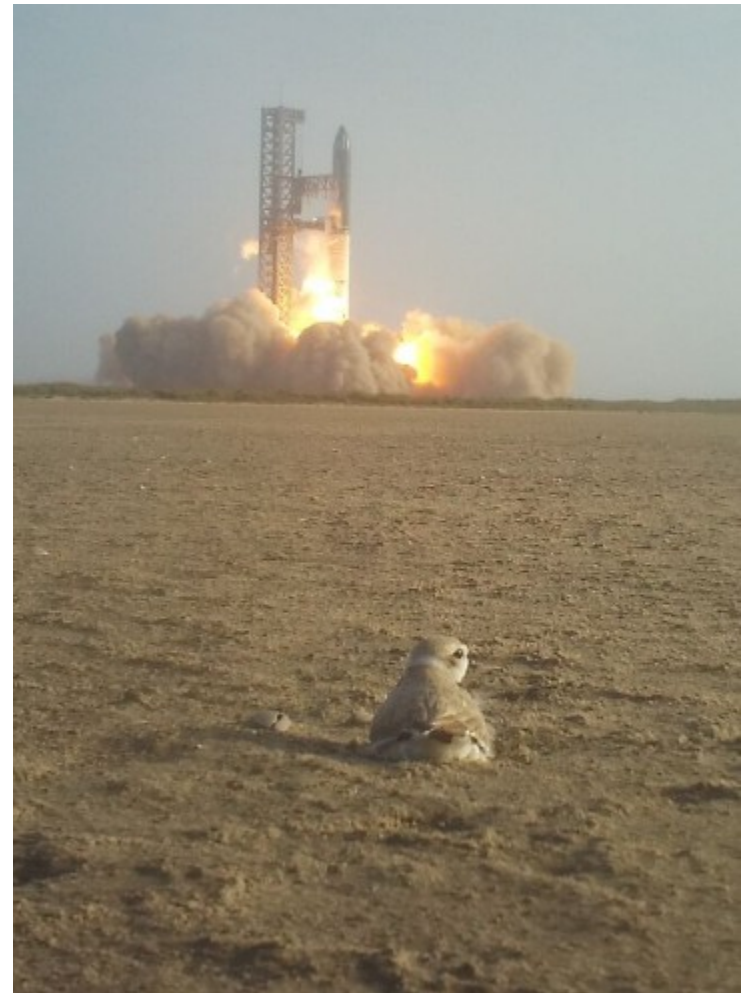
November 10, 2023

The facility had a worker-injury rate **six times** the space-industry average in 2022.

The **lax safety culture** stems in part from...a belief inside SpaceX that it's leading an urgent quest to create a refuge in space from a **dying Earth.**

If you believe the Earth is dying,

why protect the **ozone**  
or the **animals**  
or the **ocean**  
or the **air**  
or the **land**?




# Crash debris at Gulf of Mexico Reuters



April 20,  
2023



Dying?  
Or being killed?

A satellite-style map of a coastal area. At the top, a red location pin is labeled "SpaceX Starbase Tracking Station". Below it, several other red location pins are clustered together, with the word "Starbase" written in white text near them. Further down, another red location pin is labeled "Las Palomas Wildlife Management Area Boca". The map shows a coastline with blue water and brownish-green land.

SpaceX Starbase  
Tracking Station

“

We've got a lot of land with nobody around, so if it blows up, it's cool.

Las Palomas  
Wildlife  
Management  
Area Boca

- ELON MUSK

”



SPACEX



In men's sizes  
S-XL, 2X-5X

“...often under-trained and overtired staff routinely skipped basic safety procedures as they raced to meet Musk’s aggressive deadlines for space missions.”



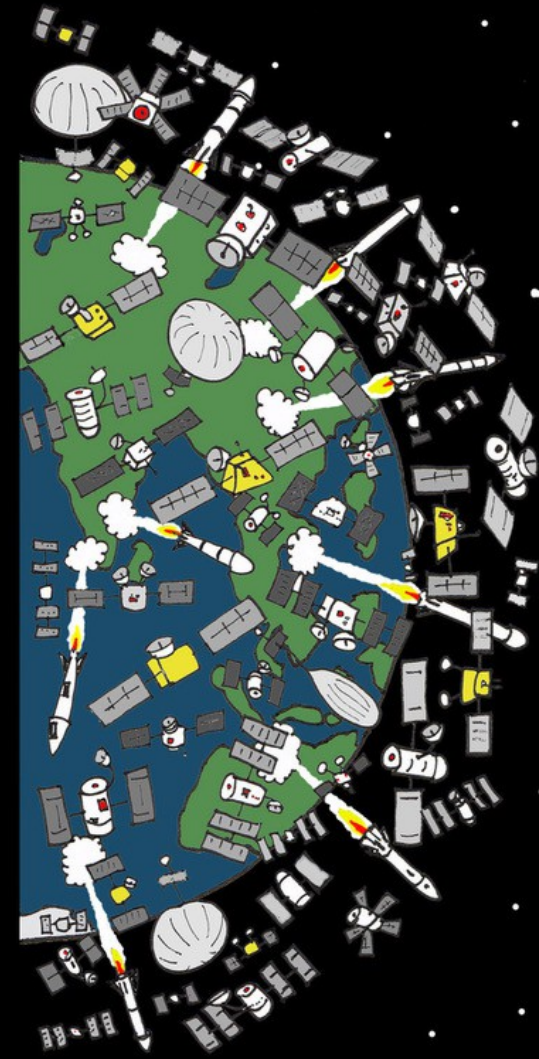
Elon's concept that SpaceX is on this mission to go to Mars as fast as possible and **save humanity** permeates every part of the company. The company justifies **casting aside anything that could stand in the way of accomplishing that goal**, including worker safety."

-- Tom Moline, a SpaceX engineer between 2014 and 2022

And casting aside the environment.



1950

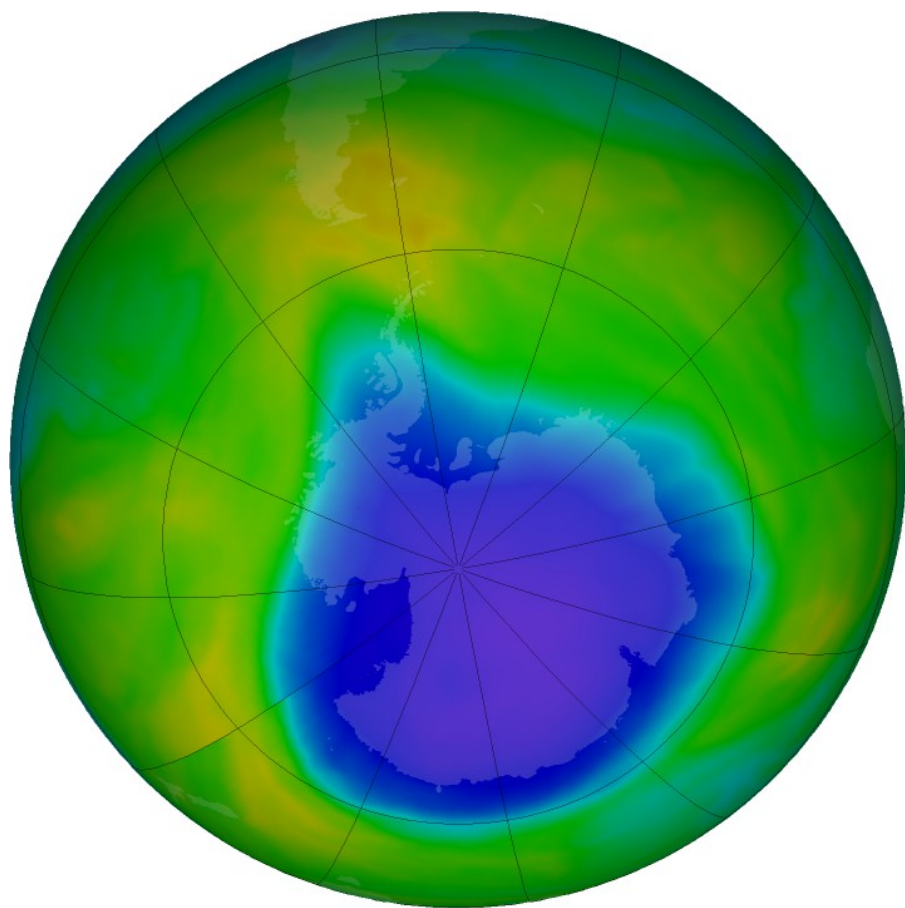


NOW

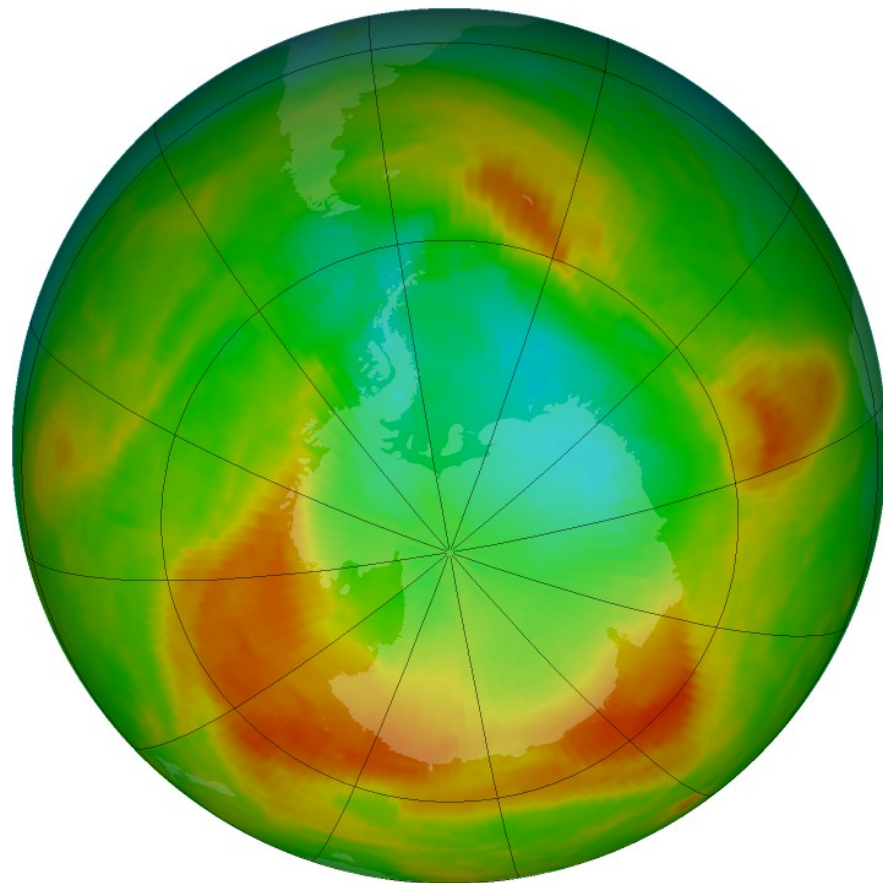
*Navele*

Then there is the ozone loss.

Ozone  
Nov. 14, 2023



Ozone  
Nov. 14, 1979



And climate change.

**JGR Atmospheres**

**RESEARCH ARTICLE**

10.1029/2021JD036373

**The Climate and Ozone Impacts of Black Carbon Emissions  
From Global Rocket Launches**

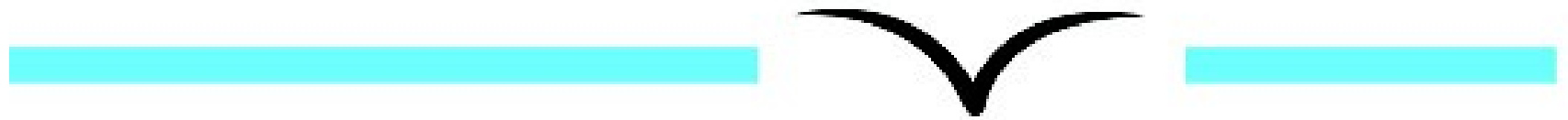
**The Register, 11-10-23:**

**US Air Force wants to see some atomic motors for future spacecraft**

Lockheed Martin has been awarded \$33.7 million by the US Air Force Research Laboratory to develop nuclear-powered electric propulsion systems for spacecraft. Under the military lab's Joint Emergent Technology Supplying On-Orbit Nuclear (JETSON) High Power program.



# Information



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# Global Network Against Weapons and Nuclear Power in Space

[www.space4peace.org](http://www.space4peace.org)



# Safe Tech International

[www.safetechinternational.org](http://www.safetechinternational.org)

