

L I F T O F F

ELON MUSK AND

THE DESPERATE

EARLY DAYS

THAT LAUNCHED

SPACEX

ERIC BERGER



WILLIAM MORROW

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KEY SPACEX EMPLOYEES FROM 2002 TO 2008

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Mary Beth Brown, assistant

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Zach Dunn, Merlin development

Kevin Miller, Merlin development

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Bulent Altan, avionics engineer

Tina Hsu, avionics engineer

Brian Bjelde, avionics engineer

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Josh Jung, ground controller

Joe Allen, McGregor lead

Ricky Lim, rocket integration

Anne Chinnery, site development

George “Chip” Bassett, launch infrastructure

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GWYNNE SHOTWELL, VICE PRESIDENT OF BUSINESS DEVELOPMENT

David Giger, Flight One mission manager

BOB REAGAN, VICE PRESIDENT OF MACHINING OPERATIONS

BRANDEN SPIKES, CHIEF INFORMATION OFFICER

T I M E L I N E

2002

MAY 6	SpaceX founded by Elon Musk
OCTOBER 31	First gas generator full-duration test-firing (Mojave, California)

2003

MARCH 11	First Merlin engine thrust chamber firing (McGregor, Texas)
MAY 31	SpaceX employees visit Kwajalein for the first time
JULY 2	First Merlin engine turbopump test (Mojave)
DECEMBER 4	Falcon 1 displayed outside National Air and Space Museum

2004

FEBRUARY 17	First propellant loading of stage one (McGregor)
FEBRUARY 22	First Kestrel engine thrust chamber firing (McGregor)
JULY 1	First complete Merlin engine test-firing (McGregor)
OCTOBER 5	Falcon 1 rocket goes vertical (Vandenberg Air Force Base, California)

2005

MAY 27	Falcon 1 static fire test-firing (Vandenberg)
NOVEMBER 27	First static fire attempt from Kwajalein (Omelek Island)
DECEMBER 20	First Falcon 1 launch attempt (Omelek Island)

2006

MARCH 24	Falcon 1, Flight One (Omelek)
AUGUST 18	SpaceX wins COTS award from NASA

2007

MARCH 21	Falcon 1, Flight Two (Omelek)
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2008

AUGUST 3	Falcon 1, Flight Three (Omelek)
SEPTEMBER 3	C-17 carrying Falcon 1 first stage departs Los Angeles
SEPTEMBER 28	Falcon 1, Flight Four (Omelek)
NOVEMBER 22	Falcon 9 full-duration test-firing (McGregor)
DECEMBER 22	SpaceX wins CRS award from NASA

2009

JULY 14	Fifth and final flight of Falcon 1 (Omelek)
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2010

JUNE 4	Falcon 9 first launch (Cape Canaveral, Florida)
DECEMBER 8	First launch of Cargo Dragon spacecraft (Cape Canaveral)

2018

FEBRUARY 6	Falcon Heavy first launch (Kennedy Space Center, Florida)
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2019

AUGUST 27 Starhopper five-hundred-foot test flight (Boca Chica, Texas)

2020

MAY 30 First astronauts launch aboard Crew Dragon (Kennedy Space Center)

AUGUST 4 First full-sized Starship prototype makes five-hundred-foot test flight (Boca Chica, Texas)

Bulent Altan's Turkish Goulash

"MAKE THIS DISH ANYWHERE A DELICIOUS DINNER IS NECESSARY."

2 to 3 onions

5 to 6 cloves garlic

1 pound ground beef

$\frac{1}{2}$ cup (1 stick) butter

Salt and freshly ground
black pepper

Three 16-ounce boxes
medium shell pasta

One 32-ounce container
of plain yogurt

1 tablespoon Turkish red
pepper powder, plus more
for garnish

Fresh mint leaves

1. Mince the onions finely.
2. Crush the skin of the garlic, peel it, and chop off the woody stem.
3. Break the ground beef into a couple of smaller pieces so it cooks more easily.
4. Melt 1 tablespoon of the butter in a large pot over medium-high heat.
5. Add the onions to the melted butter and stir until they get translucent.
6. Add the ground beef and fry with the onions, making sure to break the ground beef into really small pieces with a sturdy spatula. In the process add salt and black pepper to taste.
7. When the ground beef is cooked through and releases its juices, add the pasta and fill the pot with water until the water is $\frac{1}{2}$ inch (+/-0.100 inch) above the pasta level.

8. In parallel with the pasta operation, mix the yogurt with 2 to 3 tablespoons of salt and crush the previously peeled garlic into a bowl. Mix thoroughly.

9. Place the remainder of the butter in a small pot and add the Turkish red pepper. Don't cook it yet, but keep it ready for when the hungry masses arrive.

10. When the pasta is almost done and has soaked up most of the water, call in the people for dinner.

11. When they have lined up to eat, turn on the small pot and bring the butter to melt and foam up.

12. For each person, assemble the dish by putting the drained pasta-ground beef mixture onto their plate, covering the pasta with the yogurt mixture, then drizzling the butter mixture over that.

13. Sprinkle as much mint and more red pepper as desired on top.

EAT!

This recipe was generously contributed by its creator, Bulent Altan. Now you can bring a taste of the Omelek life into your home.