

Starship Super Heavy launch, November 18, 2022

California Water and Infrastructure Report For November 23, 2023

(With expanded coverage of all the Western States) by Patrick Ruckert

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A Note to Readers

Happy Thanksgiving to everyone. To honor the day, this report has two items.

The first is a report on the tremendous technological breakthrough represented by the November 18th second flight test of the SpaceX Starship/Superheavy. The importance of this flight could not be better expressed than by the founder of SpaceX, Elon Musk: *"For the first time, there is a rocket that can make all life multiplanetary. A fork in the road of human destiny."*

The second report is a tribute to Thanksgiving and some important history regarding the holiday.

So, once again, I hope your Thanksgiving was joyful and I hope these two articles make it a more thoughtful day for you all.

Breaking Through The Barriers to Progress

By <u>Michael Carr</u> November 20, 2023

https://www.larouchepac.com/breaking through the barriers to progress



Starship Super Heavy launch, November 18, 2022. "For the first time, there is a rocket that can make all life multiplanetary. A fork in the road of human destiny."-- Elon Musk

Young people growing up a century down the line will be taught about how the people of the 2020s broke free of the limitations of the Earth to begin to live on other heavenly bodies. We are truly living in exciting times.

Remember that less than a year has passed since the National Ignition Facility in California achieved fusion energy breakeven. This year the fusion power startup, Helion, announced that it is so far along in its development that it has contracted to sell electricity from its fusion power plants to Microsoft and Nucor (the steel company) before the end of this decade. Other fusion startup companies are not that far behind in their efforts to bring fusion energy to life as the future primary source of electricity and space propulsion.

Then there was the Saturday, November 18th second flight test of the SpaceX Starship/Superheavy. Wow! The importance of this flight could not be better expressed than by the founder of SpaceX, Elon Musk: *"For the first time, there is a rocket that can make all life multiplanetary. A fork in the road of human destiny."*

Musk had originally conceived the Starship system as the means to get a million tons of equipment and supplies to Mars. He figured that any attempt to create a self-sustaining city on Mars would require that magnitude of freight delivery from Earth. So, Saturday's accomplishment puts us well on the way to reducing the cost of delivering a ton to the Moon or Mars by perhaps a factor of 100. And that makes all the difference! That is how you move from exploration to settlement.

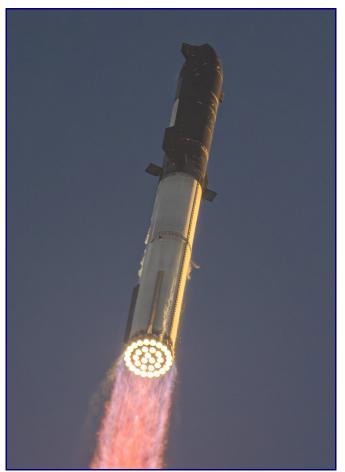
Remember how the Erie Canal reduced the price of moving a ton of grain from the Great Lakes to New York City from \$100 (or more) per ton to \$4 per ton! Of course our cities on the Moon and Mars will

look a bit different, but many principles are universal.



The Erie Canal at Syracuse, New York ca. 1900. credit: Library of Congress Public Domain

Take a look at this photo by space photographer John Kraus:



John Kraus @johnkrausphotos

Another shot of today's Starship launch. I'm still at a loss for words. What an incredible launch, and to take place at such a beautiful time of day... wow, wow, wow.

Those bright lights are 33 Raptor engines putting out about 16.7 million pounds of thrust, as compared to the 7.7 million of the Saturn V, or the 8.8 million of the Space Launch System (SLS). The exhaust plume was 1,000 feet long! The Super Heavy first stage successfully performed its mission of boosting the Starship (the black part of the rocket above) toward its intended circumnavigation of the Earth. The Starship successfully separated from the Super Heavy and then continued accelerating on its route for several minutes until it self-destructed.

The Super Heavy also self-destructed as it was changing course to head back towards Starbase and land in the Gulf of Mexico. Building this system involves solving a series of problems as they come up. And the problems only come up once you begin to test and fly. Some problems cannot be tested or simulated on the ground. Only flight test will do.

And this flight proved that (1) the Super Heavy booster is already able to launch the Starship (or any other second stage system) and (2) the Orbital Launch Mount and tower are able to easily withstand the rigors imposed upon them by the 16.7 million pounds of thrust. That is a huge step forward! An investigation by SpaceX and the FAA will go forward to analyze these results, but it is important to know that the factory at Starbase is set up for mass production of the Starship/Super Heavy system. Now that the Launch Mount and the Super Heavy have proven their capabilities, the launch pace will pick up. SpaceX intends for the Starship to replace the Falcon 9 system which is now flying every 2 or 3 days, and accelerating to one launch almost every other day next year. SpaceX hopes to begin commercial Starship flights to orbit next year.

Despite the destructive orientation of the Biden administration and Biden's personal hatred for anything initiated by President Trump (or envisioned by Lyndon LaRouche), NASA is still planning to launch the Artemis II crewed mission around the Moon next year atop an SLS rocket. (The first time that any person has gone outside of Earth orbit in over 50 years!) And NASA is counting upon using a modified Starship to land astronauts on the Moon in Artemis III and some later flights. So everyone has a stake in the success of the Starship system.

Besides the excitement demonstrated by the observers from the Texas side, this <u>amateur video of the</u> <u>crowd and the launch from the Mexican side</u> is indicative of the global interest in the success of this project. Turn off your TV and think about the meaning of this to the world and to you and your posterity for awhile. I find that people who tune out the lies of the Orwellian propaganda machine are much happier—and more productive too!

Giving Thanks this November of 2023



By <u>Robert Ingraham</u> November 22, 2023

https://www.larouchepac.com/giving_thanks_this_november_of_2023

On November 23, almost all Americans will celebrate the holiday of Thanksgiving. But in our current "culture," how many, one wonders, can truly appreciate *why they should be thankful*? How many know

and can be passionately thankful for the gifts that have been bestowed upon us? And how many have studied and pondered the principles and outlook that created the United States, which made the opportunities of today possible?



"The First Thanksgiving, 1621" (1915), di Jean Leon Gerome Ferris

People all over the world are children of God, and they are our brothers and sisters within God's creation. We as a people desire the best for all human beings. But we must also recognize that what was set into motion with the voyage of the Pilgrims to Plymouth in 1620 changed history. It created a New Hope for Mankind. It was the beginning of freeing all of humanity from millennia of oligarchical rule. And it established a new social reality which proclaimed that human beings are not beasts of burden, but that the divine spark of reason and *agápé* lies within every human soul—and that the governing of society should reflect that truth. From this recognition of Man's true nature sprang the American Republic and hope for suffering millions throughout the world.

Given the crisis of today—both within the United States and worldwide—it would behoove all of us to reflect and give thanks to God for those who crossed the Atlantic in 1620 and made possible what became the United States. It is also of critical importance to recognize that the principles and intentions which guided the Pilgrim Brethren are wholly incompatible with the Satanic impulses which govern the actions of today's global elite. If we are to defeat the current oligarchical enemies of humanity, a closer look at the heroes and heroines of 1620—what they believed in and what they fought for—is in order.

An Act of Courage

In 1619 there was only one English colony in North America, that of Jamestown, and it is important to recognize that Jamestown, like the British colonies in the West Indies, as well as the French, Spanish, and Portuguese colonies in the Americas were commercial colonies, controlled by "trading companies" in London, Madrid, and Paris, and were created for the purpose of extracting wealth and turning a profit for the investors. As such, overwhelmingly, the inhabitants of these colonies were unmarried adult men.

The Pilgrim's mission was something else entirely. The Plymouth colonists were families, and among the 102 passengers who set sail on the Mayflower were 22 women of child-bearing age and more than 30 children. These were not employees of a London-based corporation, but free men and women determined to throw off oligarchical rule, to establish an entirely new type of society. Their sacrifice was enormous. During the first winter of 1620-1621 half of the colonists died from disease and famine.

Yet in October of 1621 they organized, with their Native American friends, a celebration to give thanks to God for sustaining their colony through the worst days of crisis. Although it is not generally known today, at that first American Thanksgiving, natives from the Wampanoag tribe outnumbered the Pilgrim settlers 2 to 1.

The Pilgrim Fathers & John Robinson's Message

The two primary leaders of the Pilgrims were William Brewster, who would become the Elder of the Church at Plymouth until his death in 1644, and John Robinson who led the Pilgrim church in the Netherlands from 1608 to 1625. Both were great men, but it was Robinson who provided the philosophical and spiritual motivation which led to the decision to emigrate to America.

Robinson wrote numerous essays and sermons, many of which still exist and can be read today. What is startling in Robinson's writings is the complete absence of the Old Testament "fire and brimstone" conception of a wrathful God. Instead, Robinson returns, again and again, to the notion of Christian Love, *agápé*, as the quality which is the basis for a human society, and which is most pleasing in God's eyes. From this, Robinson develops the idea—which later profoundly influenced Cotton Mather and through him Benjamin Franklin—that the purpose of one's life on Earth is "To Do Good." He addresses this subject of "doing good" directly in his sermon "Of Created Goodness":

- "First, we must do good in obedience to God's commandments, and in honor of his name, and gospel; and must ever have that end in our eye, as archers have their mark.
- "Secondly, that we do it at all times, as we have opportunity; 'sowing our seed in the morning, and in the evening not holding our hand. . .'
- "Thirdly, we must do good readily, and whilst we have opportunity; 'not saying to our neighbor, Go, and come again tomorrow, and we will do it. . .'
- "Fourthly, according to our ability; knowing, that as our receivings are from God, greater or less, so must our accounts be, for good doing. It is true, that God looks to the heart of the doer, and measures the work by the will. . .
- "Fifthly, we must have respect to men's present wants; and not only consider, what we can best spare, but withal, what they stand most need of; as having learned of our Lord and Master, in his Gospel, that our duty is to 'feed the hungry, clothe the naked, visit the sick,' as their need is. . .
- "Sixthly, 'we must do good to all,' knowing, that wheresoever a man is, there is a place for a good turn. . . To good men we must do good because they do deserve it; to strangers, because they may deserve it, and do stand in need of it; to all men, because God deserves it at our hands, for them; to our friends, because we owe it them; and to our enemies to heap coals of fire upon their heads—the coals of charity to thaw, and soften their hardness. . ."

This admonition of "Doing Good to All" was to become Benjamin Franklin's yardstick for his life's work.

Washington and Lincoln

The creation of the "most American of Holidays" is largely due to our two greatest Presidents. Although there had been numerous "days of fasting and thanksgiving" observed in the colonies prior to and during the Revolutionary War, it was on October 3, 1789, that George Washington issued the proclamation that created the first Thanksgiving Day designated by the national government of the United States of America. This was done, explicitly, to celebrate the recent adoption of the U.S. Constitution which created the American Republic. Washington says:

"Whereas it is the duty of all Nations to acknowledge the providence of Almighty God, to obey his

will, to be grateful for his benefits, and humbly to implore his protection and favor, and whereas both Houses of Congress have by their joint Committee requested me 'to recommend to the People of the United States a day of public thanksgiving and prayer to be observed by acknowledging with grateful hearts the many signal favors of Almighty God especially by affording them an opportunity peaceably to establish a form of government for their safety and happiness.

"Now therefore I do recommend and assign Thursday the 26th day of November next to be devoted by the People of these States to the service of that great and glorious Being, who is the beneficent Author of all the good that was, that is, or that will be. That we may then all unite in rendering unto him our sincere and humble thanks, for his kind care and protection of the People of this Country previous to their becoming a Nation, for the signal and manifold mercies, and the favorable interpositions of his providence, which we experienced in the course and conclusion of the late war, for the great degree of tranquility, union, and plenty, which we have since enjoyed, for the peaceable and rational manner, in which we have been enabled to establish constitutions of government for our safety and happiness, and particularly the national One now lately instituted, for the civil and religious liberty with which we are blessed; and the means we have of acquiring and diffusing useful knowledge; and in general for all the great and various favors which he hath been pleased to confer upon us."

On Oct. 3, 1863, 74 years to the day after Washington's proclamation, Abraham Lincoln released his Proclamation, designating the fourth Thursday of November a national day of Thanksgiving. This came in the midst of the horrors of the Civil War but toward the end of a year which had witnessed the Union victories at Vicksburg and Gettysburg, as well as the issuance of Lincoln's Emancipation Proclamation. Lincoln said:

"The year that is drawing towards its close, has been filled with the blessings of fruitful fields and healthful skies. To these bounties, which are so constantly enjoyed that we are prone to forget the source from which they come, others have been added, which are of so extraordinary a nature, that they cannot fail to penetrate and soften even the heart which is habitually insensible to the ever-watchful providence of Almighty God. . . .

"It has seemed to me fit and proper that they should be solemnly, reverently and gratefully acknowledged as with one heart and one voice by the whole American People. I do therefore invite my fellow citizens in every part of the United States, and also those who are at sea and those who are sojourning in foreign lands, to set apart and observe the last Thursday of November next, as a day of Thanksgiving and Praise to our beneficent Father who dwelleth in the Heavens."

Today

So what do we have to be thankful for today? First, our Republic still stands. We are thankful to those who created it and defended it over the span of scores of years. Second, more and more individuals of courage, led by Donald Trump, are stepping forward every day to join the battle to restore our nation to its original intention. We are thankful for them. Third, parents are standing up to defend their children and provide a future for them. We are thankful for them. Fourth, great advances in science and technology, such as the November 18th test flight of SpaceX's Starship/Super Heavy rocket system, hold the promise of a glorious future for generations yet unborn. We are thankful for those who made this possible. Fifth, God's gift of creative reason and *agápé* still reside—as the most powerful human potential—within the hearts and minds of our citizenry. For this we are eternally thankful.

That's a lot to be thankful for, and it should embolden us to win the battles ahead.