

KESHA ROGERS

Frontiers of Space: Fulfilling Mankind's Destiny as Man in the Universe

This is an edited transcription of the presentation of Kesha Rogers to the Schiller Institute conference in Morristown, N.J. on Feb. 16, 2019. Ms. Rogers is a member of the LaRouche PAC Policy Committee. She has been a candidate for U.S. Congress, securing the Democratic Party nomination, and not just once, and forcing a run-off in her bid for U.S. Senate from the state of Texas.



EIRNS/Stuart Lewis

Kesha Rogers

gram has to continue. I want to start my topic and my remarks today on the theme “The Frontiers of Space: Fulfilling Mankind’s Destiny as Man in the Universe.”

Celebrate Our Accomplishments in Space

This year our nation and the world will celebrate the 50th anniversary of the first humans to ever walk on the surface of the Moon, in July of 1969. Many of

Thank you Jason, and thank you all for being here today. It is a pleasure to see so many people here that are passionate about our space program, as I am, and the great vision and mission for mankind.

I want to thank Helga, for her inspiration and vision of bringing this conference together. [applause]

It is because of the vision and life’s work of Lyndon and Helga LaRouche, dedicated to the progress of mankind, that we gather here today. I’m happy to be joined on this panel by some extraordinary individuals and speakers who I’ve had the pleasure of meeting, when Lyndon LaRouche asked me, and we talked about running for office, and the idea for a campaign around the revival of our space program.

After I first saw Mr. LaRouche’s, “The Woman on Mars” video, which Jason just showed, I vowed that I would dedicate myself to fulfilling that mission. I don’t come from a technical, scientific background. I did it as someone who represents the ordinary man and this vision for the ordinary man. And I’m proud of the support that I’ve received from a number of people within our space program, who understand that that wasn’t just a vision of the past, that the space program is not just something from the past, but something that drives us into the future.

The passion that we see exhibited in our space pro-

gram has to continue. I was not even thought about yet! [laughter] This year is also the 47th anniversary of the last humans to walk on the Moon. Nobody celebrates the ending of our human lunar space program, because we are proud of achieving a leading role in space, not of abandoning that role.

It is time to reclaim our destiny, not merely as a space observing civilization with our impressive array of space satellites, telescopes, stations, and rovers, but as a *space colonizing* civilization, as the vision of Lyndon LaRouche demonstrated clearly in that video. And this requires fundamentally rethinking not only the importance of human space exploration in itself, but also requires rediscovering what it means to be truly human in the first place and realizing how that is inseparable from our destiny as Man in the Universe.

This dedication to the mission of advancing our understanding of our human destiny of mankind in the Universe, has been the lifelong commitment of Lyndon LaRouche and his relationship in the simultaneity of eternity with all the great visionaries and classical minds that came before him and those who will come after. Reclaiming our destiny in space will not merely require having the right space vehicles or ad-



EIRNS/Eli Santiago

“What distinguishes a life as human, as exalted above the condition of mere beast, is that which the individual contributes to the enduring benefit of future generations.”

vances in technology. It will require, as LaRouche has declared, shedding “at last the cultural residue of the beast.”

Thirty-four years ago in 1985, speaking at a memorial conference of the Schiller Institute, in honor of the great space pioneer, Krafft Ehrlicke, Lyndon LaRouche reflected at the time,

As each of us is born, each of us must die. Within that brief interval of life, what distinguishes a life as human, as exalted above the condition of mere beast, is that which the individual contributes to the enduring benefit of future generations.... There, in the stars, lies mankind’s entry into the long-awaited age of reason, when our species sheds, at last, the cultural residue of the beast.

Let us look back, to the brief life of President John F. Kennedy and his opening



NASA

President John F. Kennedy commits the nation to send an American to the Moon, at a Joint Session of Congress on May 25, 1961.

of this door into the age of reason. On May 25, 1961, President Kennedy announced before a special Joint Session of Congress the dramatic and ambitious goal of, before the end of the decade, sending a man safely to the Moon and returning him to the Earth.

The achievement of such a bold undertaking for the nation, of accomplishing a mission that had never been attempted by any other nation, was not going to be done on a whim or a gamble. It required, as Kennedy understood clearly, long-term and visionary leadership, an economic driver and a scientific driver. As he clearly stated in that same speech to Congress,

Now it is time to take longer strides—time for a great new American enterprise—time for this nation to take a clearly leading role in space achievement, which in many ways may hold the key to our future on Earth.

I believe we possess all the resources and talents necessary. But the facts of the matter are that we have never made the national decisions or marshalled the national resources required for such leadership. We have never specified long-range goals on an urgent time schedule or managed our resources and our time so as to insure their fulfillment.

A Closed- or Open-World System?

The Apollo program wasn’t just a fly-by-night program. This program would become one of the greatest economic drivers the nation would ever experience. It never had to do with merely planting a flag on the Moon before the Soviets, and saying, “Been there, done that.” It was a commitment to what Krafft Ehrlicke had called an Open World System, or a “pro-growth paradigm.” We’ll come to this in just a moment.

In the course of eventually sending six missions to the Moon, we permanently increased the standard of living worldwide through thousands of spin-off technologies, and collaboration

FIGURE 1A

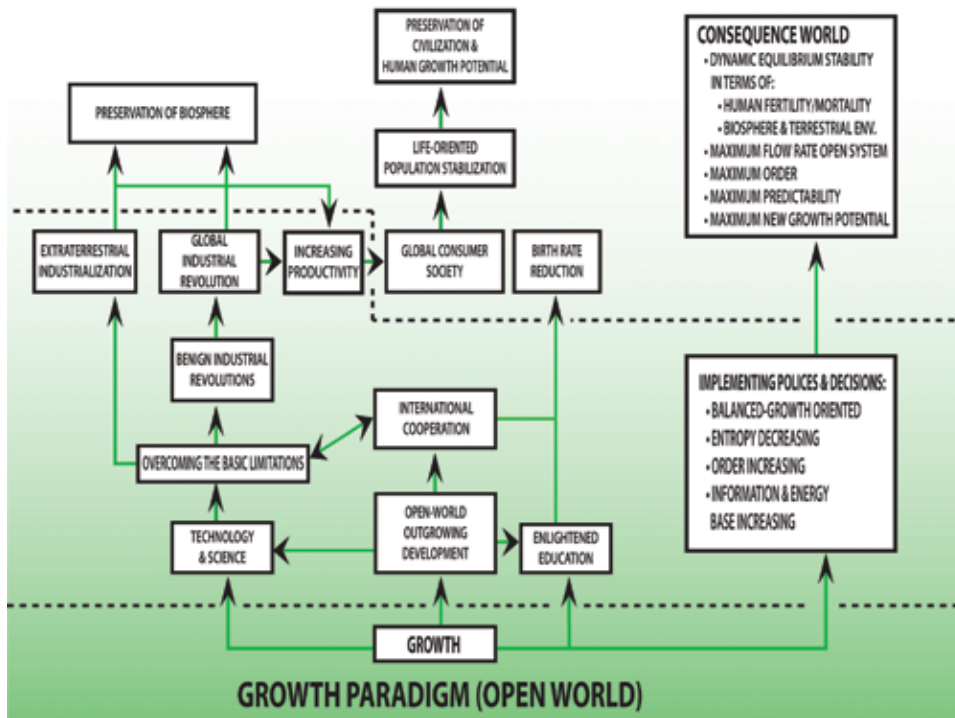
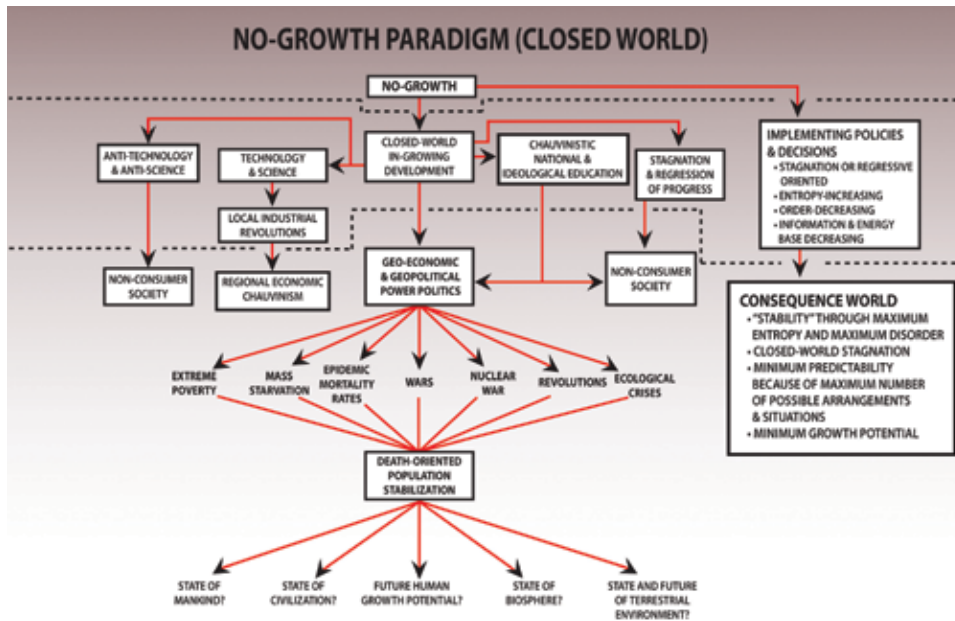


FIGURE 1B



among nations. These missions were to prepare the way for further exploration, development, and eventually permanent interplanetary settlements, such as Ehrlicke’s concept of Selenopolis, which is his depiction of a

on this panel, and the resurgence of what I would call an egotistical identity politics, that has nothing to do with who we are as human beings.

Under today’s “no growth” or closed world econ-

space colony on the Moon, and Lyndon LaRouche’s concept for Kepleropolis on Mars—both quite visionary in their artistic minds.

The consequences of a growth paradigm [Figure 1a] are the idea of making a conscious decision in favor of the idea of there being no limits to growth, in favor of technological improvement, and for advances of the living standard of your population; of rejecting birth rate reduction. When we shed all limitations to growth, this is what launches us into an Open World System, in which there’s no limitations to man’s progress in the universe.

But the full realization of that vision, as I explained earlier, exemplified by our space program with the Apollo mission, with the later vision of Krafft Ehrlicke and of Lyndon LaRouche, was shattered, as our nation and world were plunged into the budget-cutting, zero growth economy of a “Closed World System,” which started in full gear after the assassination of President Kennedy in 1963, and led to a permanent state of war—as we’ve seen, and many of us have lived in, in our entire lives—fake growth programs like the idiotic Green New Deal that you’ll hear a lot more about



LPAC

omy, the economy is treated like one of those “all you can eat” buffet table restaurants. Every sector has its own dish, and none is more or less important than the other. If you like space, you put some of that on your plate; if you like high-speed trains, you put it on your plate; if you don’t like brussels sprouts, or Wall Street gambling—don’t pick that, you know. You grab what you like.

Now I am going to tell you that this approach to humanity’s long-term survival on the planet, and in our Solar system, is not merely a wrong opinion, but it is tragic, and condemns human civilization to a miserable existence of war, poverty, and eventual extinction, sooner or later. These [Figure 1b] are the consequences of a no-growth system.

A far better metaphor to imagine human economy, is a vehicle driving us to our destination. If our destination is to raise society above the poverty line,—more importantly to eliminate poverty completely—I don’t believe in “raising above the poverty line,” I think we have to completely eliminate poverty—if our destination is to eliminate horrible diseases, to stop wars, to end cancer and AIDS, then the economy, as Lyndon LaRouche made clear in his “The Woman on Mars” broadcast, is the means by which we get to our destination.

In this metaphor of the vehicle of the economy is what is impor-

tant. What is the important part of the vehicle? What makes it go forward? The engine! And the most powerful engine known to man is human space exploration. Think about it.

Why Human Space Exploration?

Why human space exploration, and not something else? Why not more money in the economy?

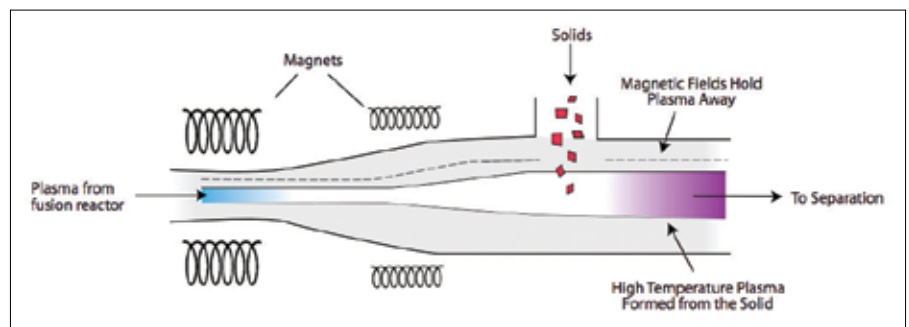
Because humanity is a space-based civilization. We live in our galaxy and Solar system, and whether you think about this or not, your day-to-day life is profoundly affected by activity in space. This is most obvious with the Sun, but also ca-

tastrophes caused by space weather and asteroid impacts. I don’t know if people remember this, but yesterday was the sixth anniversary of the asteroid explosion over Chelyabinsk, Russia. And, more importantly, through the millions of ways that technology spin-offs from human space exploration permanently increase the standard of living of society, everywhere it touches.

Quite simply, the most efficient driver of human progress, the one that gets us to our destinations of eliminating poverty, disease, and war, the fastest, is human space exploration. This may not seem so obvious, but it should become clear as we think about the subject and theme of this entire conference, and what we’re doing to raise a new epoch of mankind.

The achievement of a permanent lunar presence is the gateway to the development of a human economy in space and is essential to the development of a productive economy and city-building here on Earth.

FIGURE 2
Schematic Diagram of a Plasma Torch



I want to take a moment here, because this very much reflects the work of Mr. LaRouche's Fourth Law, in his "Four New Laws to Save the USA Now." Here you see [Figure 2] a basic schematic of a plasma torch. The idea here, is everything from seawater to landfill waste can be heated into a plasma, where it becomes magnetic, and then specific elements can be mined from that like nickel, gold, iron, and so on, and can be distilled out at the isotopic level, and used in the economy.

This is one reason why Lyndon LaRouche has emphasized that a program for the economic development of the Moon, in conjunction with a crash program for fusion power, would be one of the most important scientific driver programs for mankind. Fusion, which will be explained further, does not just help us to make faster rockets or producing abundant electricity, it allows us to have complete control over the isotopes of the elements of the periodic table.

In his [policy document](#), "The Four New Laws to Save the USA Now," published in June 2014, LaRouche wrote:

Progress exists so only under a continuing, progressive increase of the productive and related powers of the human species. That progress defines the absolute distinction of the human species from all others presently known to us. . . . A fusion economy is the presently urgent next step, and standard, for man's gains of power within the Solar System, and, later, beyond.

The Direct Fusion Drive

Let's look at some of the impressive work underway on fusion. There is a three-minute [video](#) that I'd like to highlight here, which shows the potential of fusion power. This gentleman, Michael Paluszek, at Princeton Satellite Systems (PSS), has given a presentation on helium-3 and interviewed with our organization before. He and the others at PSS have an impressive new program that they're working on, fusion for long-term space exploration.

The video tells the following story:

Dr. Samuel A. Cohen, Director, Program in Plasma Science and Technology, Princeton Plasma Physics Laboratory: Direct Fusion Drive is a new



PPPL

Michael Paluszek (right), Samuel Cohen (center), and Stephanie Thomas (left) inspect their Direct Fusion Drive device at the Princeton Plasma Physics Laboratory.

concept for propulsion based on fusion energy, and it provides in a single package both propulsion and electrical power.

Stephanie Thomas, Vice President, Princeton Satellite Systems: So this Direct Fusion Drive (DFD) is really a game-changing technology, enabling us to reach deep space destinations much faster than and with vast amounts of electric power. NASA's interested in a variety of deep-space destinations, such as getting to Jupiter in one year, Saturn in two years, Pluto in four to five years. A single DFD engine, on the smaller side, so, a 1 MW DFD engine, can do any of those missions.

We can literally fly straight to Pluto, fly straight to Jupiter, do not stop, do not pass Go, do not collective \$200, fly directly to your destination! That's a dramatically different way to operate deep-space missions. It will save time, it will save money and we'll be able to do more science when we get there.

Male: DFD is under development at the Princeton Plasma Physics Lab.

Cohen: In DFD, rotating magnetic fields created by antennas on the front and back of the vessel and on top and on bottom, create current in the plasma and that current helps to confine the plasma and to heat the plasma to about 1 billion degrees Centigrade.

So the purpose of the DFD is to make thrust, but the fusion reactor makes energy, it makes energetic particles, so you have to convert that energy into thrust. We



Courtesy of Krafft Ehrlicke

Krafft Ehrlicke

do that by allowing the fusion particles, the fusion products, to pass through the scrape-off layer, heating up the plasma there, and that plasma shoots out the nozzle, generating the thrust.

Male: DFD is different from other fusion concepts because it is much, much smaller.

Cohen: Ours, which you can see behind here, would be about the size of a minivan.

Michael Paluszek, founder and President, Princeton Satellite Systems: The current machine, PFRC-2, very efficiently heats electrons and we're upgrading the power supplies so that we can heat ions.

Cohen: If we can heat the ions, in this machine, to about 10 million degrees Centigrade, we could prove some of the physics theories that have told us we can make the fusion reactor.

Paluszek: A 1 MW power plant is ideal for a wide variety of applications. This includes military forward power, remote power, affordable power, emergency power, powering mines in the Yukon, and powering spacecraft.

Thomas: There's a lot of interest in searching for

life on Europa which is one of the moons of Jupiter. We could get there in one year with just a single DFD engine.

Paluszek: With a few kilograms of fuel we have enough power for more than 10 years.

Cohen: We could deflect asteroids that might be coming towards the Earth, that would cause major damage. Working on this is very meaningful: The ability to provide power to people on the Earth, the ability to explore the planetary system, to go beyond the planetary system.

Paluszek: We're excited about the future, because DFD opens the door to new applications that are not possible today.

Shed the Cultural Residue of the Beast

I would like to conclude my remarks with a quote from the great visionary and space pioneer Krafft Ehrlicke, who was a great friend and collaborator, mentor, of Lyndon and Helga Zepp LaRouche. His dedication to the true cause of space continues to inspire us.

Krafft Ehrlicke's [paper](#), "Lunar Industrialization and Settlement: Birth of a Polyglobal Civilization," in which he develops five stages of lunar development centered on the increase of what Ehrlicke calls the "human sector." Now, for time reasons, I'm not going to go through all of Krafft Ehrlicke's beautiful concepts of lunar colonization and lunar settlement, but I will share his words that well encapsulate his vision and principles: [**Figure 3**]

The most important aspect of Lunar development lies in the human sector. It bears repeating that technological progress and environmental expansion are no substitutes for human growth and maturity, but they can help the human reach higher maturity and wisdom.

That is our mission, to shed the cultural residue of the beast, and at last enter into the long-awaited age of reason. Let us again dedicate ourselves to the future of mankind as the Creator intended for us, as man in the universe.

I thank you very much for your time. [applause]