International LaRouchePAC Fredags-webcast den 27. november 2015: LaRouche: »Med mindre, og indtil, Obama smides ud, står verden på en knivsæg til atomkrig. Strategisk analyse med Jeff Steinberg m. fl.

Lyndon LaRouche har hele vejen utvetydigt sagt, at med mindre, og indtil, Obama smides ud, står verden på en knivsæg til atomkrig. Spøgelset af denne fare sås skarpt i tirsdags med Tyrkiets nedskydning af et russisk fly, der var engageret i bombetogt nær den tyrkisk-syriske grænse. LaRouche kom omgående med en offentlig erklæring, der sagde, »Obama har organiseret en krigshandling, og således sat USA, såvel som resten af menneskeheden, i fare«. Han sagde, at det »var et overlagt forsøg fra Obamas side på at fremtvinge generel krig«. Engelsk udskrift.

MEGAN BEETS: Good evening. It's November 27, 2015. My name is Megan Beets, and I'd like to welcome all of you to our regular

Friday evening broadcast here at LaRouche PAC. I'm joined in the

studio tonight by Jason Ross and I'm also joined, via video, by

Jeffrey Steinberg.

Now in discussions earlier this week, Mr. LaRouche made it very, very clear that the key issue facing all of us, is whether

the people of the United States, in particular, both the people

in positions of leadership, such as the Congress, but also the population in general, have the guts to stop compromising with Obama, to tell the truth, and to throw him out. Now, what we've

seen shaping up over the past weeks is a very dramatically and a

very rapidly shifting world strategic situation, including ongoing Russian military intervention into Syria; also including

the recent wave of terrorist attacks, such as the bombing of the

Russian plane over Egypt, and of course, the terrorist attacks which occurred just two weeks ago in Paris, which was followed by

a shift in dynamic among world leaders, away from the failed Obama policy, and toward a broader collaboration with the Russians to defeat ISIS.

However, throughout all of this, Mr. LaRouche has been unequivocal that unless, and until you get Obama out of the U.S.

presidency, the world stands on a razor's edge of thermonuclear

war.

Now the spectre of that danger arose sharply this Tuesday, with the Turkish shooting down of a Russian plane which was involved in operations near the Turkish-Syria border. And Mr. LaRouche immediately issued a statement, a public statement, which said that "Obama has organized an act of war, and thus endangered the United States, as well as all humanity." He said

that it "was a deliberate attempt by Obama to force general warfare."

Now, this act by Turkey and by Obama, and the aftermath, has catalyzed a very significant change in the world global dynamic,

which we're seeing manifest, for example, in Europe, among other

places. This shift is also the subject of tonight's institutional

question, which makes reference to the ongoing talks in Vienna,

which are aimed at resolving the situation in Syria. The question

reads as follows:

"Mr. LaRouche, please give us your view of how Russia and Turkey can move once again to collaborate to save Syria under the

Vienna process?" So now I'm going to turn it over to Jeff to give

Mr. LaRouche's response to that question, as well as an elaboration of the general strategic picture.

JEFFREY STEINBERG: Thank you, Megan. Can you hear me there? Well I think that the starting point must be to tell the truth as

we know it about the events of last Tuesday. It was immediately

understood by leading political and military circles in the United States, in Europe, and most emphatically in Russia, that

the action that was undertaken by the Turkish in shooting down that Russian SU-24 over a border area on the Turkey-Syria border

right along the Mediterranean coast, that this was something that

1) was order top down in Turkey from President Erdogan, and 2) Erdogan would never have undertaken such an action if he did not

have advance approval from Obama and the British.

So, for the Russians, this represented a major act of war,

and I can tell you that within the U.S. governing institutions,

there was a deep and profound split that reflected immediately in

actions that were diametrically opposite. Secretary of State John

Kerry, leading circles within the Pentagon all the way up to the

Joint Chiefs of Staff, immediately activated channels with Russia, knowing full well that there was a very real prospect that Russia would retaliate immediately after this unwarranted military provocation. And so, you have one element of the U.S. command that is not under British control, that moved immediately

to at least temporarily forestall a situation that was potentially moments away from a general war between NATO and Russia. And as we've been saying, as Mr. LaRouche has been warning since virtually the beginning of the Obama presidency, any such war between NATO and Russia would very rapidly devolve

into a thermonuclear war, in which the overwhelming majority of

humankind would likely not survive.

So you had actions. There was red phone line communications activated immediately, between those elements in the U.S. Command

that were not on the British line, and top Russian officials. And

the first objective was simply to secure a commitment that the situation would not immediately go to a hot war. In other words,

this was the most dangerous situation since, and probably more so, than even the Cuban Missile crisis. Because in the Cuban missile crisis, there was no shoot down of an American or a Soviet ship or a plane.

On the other hand, President Obama, who was closer to Erdogan than virtually any foreign leader, perhaps with the

sole

exception of David Cameron in Britain, immediately got on the phone with Erdogan and then issued public statements certifying

that, in his mind, Turkey acted perfectly within their sovereign

rights to shoot down a plane flying over its territory.

Now, never mind the fact that there are serious questions

and disputes of whether that plane, that Russian plane,

actually

ever even entered Turkish airspace. The fact is that, if it passed through Turkish air space at all, number one, there was never any intent—and nobody in Turkey even claimed there was any

intent on the part of the Russians—to carry out any kind of military action or provocation against Turkey. And secondly, even

after the first 24 hours following the shoot-down, the Turks were

even acknowledging that that plane, if it ever in fact crossed into Turkish territory, was there only for a matter of brief seconds, and no longer.

Now that also tells you that to shoot down that plane, was a premeditated, pre-determined decision. There was not enough time

for the Turkish air force to consult up the chain of command all

the way to President Erdogan, and to then get response orders back, and to fire at the Russian plane — all within a matter of

a timeframe that at most has been characterized as 17 seconds. So, again, it was a premeditated act of war; and Erdogan on his

own never would have undertaken that. It was done in conjunction

with both Obama and the British; and therefore, the responsibility lies there.

Now, let's again visit what the immediate context was of this incident. It occurred last Tuesday at a point that French President Hollande was in Washington to attempt to organize President Obama to join a trilateral military alliance of France,

Russia, and the United States, to wipe out the threat of ISIS and

Nusra, and all allied organizations inside Syria and inside Iraq

primarily. And so, the events that took place just as Obama and

Hollande were sitting down, hijacked the agenda of that discussion. All you have to do is read the transcript, or even better, watch the video of the press conference that took place

later that same day between Obama and Hollande; and you'll see towards the end, Obama launching into a typical Obama tirade against Putin and against Russia. Obama was lying pathologically

in saying that the United States is leading a coalition of over

60 countries, and that Russia, when it comes to fighting against

the Islamic State is "the outlier"; and it went on from there. So, statements soon after that, again from the White House, fully

endorsed and adopted the Turkish line on what happened.

So, here you've got a situation where an act of war, an act of military aggression took place, carried out by Turkey — a NATO member — and was done with the full at least tacit backing

of the President of the United States, with the full support of

the British. How close do you have to get to provoking thermonuclear war before enough people in Congress and in the American population wake up and recognize that Lyndon LaRouche has been right for years in warning about the menace that President Obama represents if he's allowed to continue to remain

in office? We're down to the final 14 or so months of his Presidency, but you can see the kind of developments that can occur on literally a moment's notice. And so, there is no option

any longer other than removing the President from office by Constitutional means immediately. That means that the leading members of Congress and at least leading elements within the American population have got to finally wake up to strategic reality.

Now, to put an added punctuation mark on the situation, let's not forget that there was another major series of provocations directed against Russia over the same recent timeframe of the last week. You had the Right Sector, the neo-Nazi apparatus in Ukraine, that is openly backed and promoted

by the Obama administration principally through Victoria Nuland,

the Assistant Secretary of State for European and Eurasian Affairs, who carried out a bombing campaign against the power grid of Crimea; and has effectively shut off almost all power to

the entire Crimean peninsula. When Russian repair units attempted

to get to the sites to re-establish the power links, they were fired on by Right Sector militias; and to make matters even worse, at the end of last week, it was announced by Nuland's pet

prime minister, Yatsenyuk, that henceforth all Russian flights over Ukrainian airspace were cancelled. Now, that's tantamount to

a threat of yet a second country, a major ally of the US and the

British, threatening to carry out unprovoked strikes against Russian aircraft flying over Ukrainian airspace.

So, you've got a clear pattern here. You have — as Megan

indicated — a phase shift with the series of ISIS terrorist attacks over the last several weeks, that began with the bombing

of the Russian Metro Jet over the Sinai; followed with a series

of suicide bombings on the southern portions of Beirut in Lebanon, targetting the Shi'ite area of that city. And then the

Paris attacks. The world was energized to finally launch an all-out serious campaign against the Islamic State. Russia escalated the bombing campaign against the Islamic State and knocked out an estimated 1000 of the tanker trucks that have been

smuggling oil from the ISIS-controlled areas of northern Syria into Turkey, where they've been sold on the black market; and these funds have been fueling the operations of the Islamic State.

At the G-20 summit meeting that ironically took place in Turkey just days before the Turkish air force shot down the Russian SU-24, President Putin made very clear that Russia has aerial photographs showing lengthy caravans of these oil tanker

trucks crossing the border into Turkey from northern Syria; and

furthermore, he said he has the names of financial agents in 40

countries, including a number of the G-20 member countries, that

are involved in financing the Islamic State through black market

cooperation. So, the case is unambiguous. If you wanted to attribute narrow motives, you could say that Erdogan was furious

at the Russians for bombing these Turkish smuggling trucks, since

we know that the funds generated on the Turkish side from this black market activity largely go into the coffers of the

ruling

AKP Party. We know that the son of President Erdogan is himself

one of the major people involved in this black market operation.

But in a very real sense, that's a much too narrow understanding of what happened here. It eliminates the crucial question, which is that Obama and the British were behind this,

and it was an attempt on a much grander scale to not just simply

sabotage the Vienna initiatives; but it was an attempt to trigger

a potential world war. And for that crime alone, despite the fact

that there is a long list of Constitutional violations and other

crimes committed by this President, for that reason alone he must

be immediately removed from office. And therefore, every person

listening to this broadcast, all of your friends, all of your neighbors, all of your political associates, your co-workers, are

going to have to do some serious soul searching; because we came

inches away from world war last Tuesday morning, with the Turkish

actions. And it was only a matter of intervention, but particularly restraint on the part of Russian President Putin and

the Russian military that averted that. There is still clearly an

option, and lessons to be learned from this provocation, that could and must lead to reaching an agreement in Vienna to end the

five-year war and tragedy in Syria. But that must start with

the

kind of blunt truth which we have been discussing here over the

last few minutes; and it cannot go forward so long as President

Obama remains in office. So, there are urgent issues that must be

taken up by the Congress and by the American people, if we are going to avert a war; because I can assure you, if those critical

actions are not taken in the immediate days ahead, then the chances that there will be {another} incident; {another} provocation, whether by Ukraine, whether by Erdogan and the Turks, whether by ISIS, and if actions aren't taken to solve the

problem at its roots, we will be staring at the prospect of world

war in the immediate days, perhaps hours ahead.

BEETS: Okay, thank you very much, Jeff. Now, upcoming this Monday, November 30th, we have the beginning of a two-week long

genocidal COP21 depopulation climate conference, which is occurring in Paris, and despite the actual danger to humanity which Jeff just outlined in detail, and especially in the wake of

the terrorist attacks in Paris just two weeks ago, this absolutely insane conference is going ahead as scheduled, to be

attended by approximately 140 heads of state, along with thousands of other government, NGO, and other officials, notably

Britain's Prince Charles, the dysfunctional and inbred son of Queen Elizabeth and her walking-dead husband, Prince Philip, will

be one of the keynote speakers.

Now, as we addressed in this webcast last week, if anyone

involved had any morality, we would completely change the nature

of the conference, to address the actual dangers and threats to

humanity, such as the refugee crisis, the conditions of poverty

around the world, and the lack of development that are actually

threatening billions of people. So what I'd like to do now, is ask Jason to come to the podium to address this upcoming conference in the context of what Jeff just presented.

JASON ROSS: This is almost like the worst joke you could imagine, holding this conference in Paris. This conference which,

starting in a few days — we've been opposing this, and we've got

a leaflet, a resolution that we've been getting out on this, called, "We Say No to the Paris COP21 CO2 Reduction Scheme." I want to read the bookmarks of this, the bookends. It opens, "The

conditions for life of billions of people depend upon rejecting

the agenda being presented at the 2015 climate change conference

to be held in Paris this December. The COP21 Paris initiative to

adopt a legally-binding agreement to reduce CO2 emissions must be

rejected on two grounds: the scientific reality, that mankind's

activity, is {not} going to cause catastrophic climate change, and the very real lethal consequences of the CO2 reduction programs being demanded." It ends, that "Energy-intensive scientific, technological, and economic growth is essential to human existence. This can be measured by transitions to higher levels of energy-flux density per-capita and per-area. Such

progress, growth, and development, is the universal right of man,

and CO2 emissions are presently a vital part of that process for

the overwhelming majority of the world's population. The adoption

of a legally-binding CO2 reduction scheme at the COP21 conference

in Paris will condemn billions of people to a lower quality of life, with higher death-rates, greater poverty, and no ability to

exercise their inherent human right to participate in the creation of a better condition for society as a whole. This is deeply immoral. For these reasons, the CO2 reduction scheme of the COP21 conference in Paris must be rejected."

So on the grounds of the fakery of the science, and the very, very real human costs of trying to meet the CO2 reduction

goals, this can't go forward. However, obviously the push is there, the conference is going ahead despite the state of emergency currently in France, the terrorized population of Paris, changes in some of the agenda, but it's going ahead, and

as a matter of fact, this conference is getting a kick-start over

the weekend — today and the rest of the weekend — the Commonwealth Heads of Government meeting is taking place in Malta. So this is where all the members of the former British Empire, now called the British Commonwealth, get together to — as in this case — hear speeches from the Queen and others about

why they need to reduce CO2.

Prince Charles — who has been basically waiting for his mother to die for a half century to get a job — he said that the

terrorism that we're seeing, the conflicts that we're seeing, are

not because of conflict, not because of ISIS, not because of the

Brits and Saudi Arabia helping ISIS, instead, Prince Charles said, "In fact, there is very good evidence indeed that one of the major reasons for this horror in Syria was a drought that lasted for about 5 or 6 years, which meant that huge numbers of

people in the end had to leave the land." This is the guy that they're asking to give the keynote address at the COP21 conference — a man whose understanding of Syria seems to be that

all of the conflict is because of a drought which was caused by

climate change. It's insane, and it's knowingly evil on his part.

So, what should be done instead, is re-purposing the conference would be a good thing, you know, recycling what's going to be done there. As Megan said, of course, addressing the

refugee crisis, which is all over Europe at present, and beyond

- that's worth discussing. Really, what's worth discussing is a

solution to this whole problem, which would be excellent if the

Congress were to release the 28 pages, put them in the record, as

Senator Gravel did with the Pentagon Papers, to be able to attack

the cause of this conflict at its source, which as Jeff went through, as LaRouche has been stressing, is Obama, who by his nature as a killer personality, has qualified himself to be inserted into his role as President. That that is the cause of the conflicts. Releasing the 28 pages, discussing how to actually

shut down terrorism in the region, working {with} Russia on this

- you know, Russia is serious about this - you know, that would

be worth discussing.

And really, what would it mean to develop the world into the Silk Road? You know, EIR released, about a year ago now, "The New

Silk Road Becomes the World Landbridge." It's a 300 and — almost

400 page report. It goes through in incredible detail, with maps

and everything, what it would mean for China's One Belt One Road

project, its New Silk Road project, to continue its extension into a worldwide paradigm of development. What would those projects look like? And this is a policy that the LaRouches have

been promoting for decades, and Helga LaRouche in her visits to

China is acknowledged as "the Silk Road Lady," for her role in bringing this outlook into the current fruition that it's finding. So what would it mean for the U.S. to join the Silk Road? What would it mean for us to get our act together? Well, we've been working on a report on this, in terms of what a U.S. recovery would look like, and there's a lot of aspects to this. I mean, if you think about the kinds of projects

that have, many, been on the books, and the kinds of projects that will drive us into the future, you recognize that it would

not be very difficult to create millions of jobs in a very short

period of time — meaningful, productive jobs — that lay the groundwork for a durable new, more productive economy for the future. Doing that will require eliminating Wall Street, getting

Glass-Steagall re-implemented, having those provisions back in place, shutting down Wall Street which we do not need.

Gambling

is not an essential part of economy. The productive process, science, creativity, the development of human beings and infrastructure — that is essential. Gambling is not. So with Wall Street out of the way, with federal financing, with federal credit made available, some of the projects are things that we've discussed quite a bit. Take, for example, the

Bering Strait. Crossing the Bering Strait with a tunnel or a bridge, as engineers decide, would be a very key role, a very key

project, to put the U.S. on the Silk Road, literally, making it

possible to get from the West Coast of the U.S., into Eurasia, much more quickly than by sending a ship across the ocean, with

the added benefit that rail, or transportation corridors on land

overall, allow for the ability to develop regions along the way. Something that a ship crossing the ocean doesn't do. Ships

don't create wealth, or the potential to create it, as they cross

the waters. Land connections do.

So the Bering Strait tunnel — that would be a key project. Overall, transportation has a tremendous way to go in the U.S. You know, China, which is a nation very similar in size to the United States, currently has 11,000 miles of high-speed rail, with plans to have 30,000 by 2020, and they'll do it — they do what they say. In contrast, we have under 500 miles of high-speed

rail, and that's being very generous in counting the Acela service as high-speed. What we should have is 42,000 miles of electrified, decent rail in the United States, bringing down the

costs of transportation, and of production throughout the nation,

making it more possible to move intermediate goods from place to

place, to move people, to move products in a way that will have a

tremendous savings in time, and in energy costs.

Currently over half of rail-freight in the U.S. is coal. You know, in a nuclear economy we obviously wouldn't need so much coal, but it also goes to show how little else is being done with

the system as it is, and maybe some idea of what it could be like

in the future.

Along with the development of the basics which we naturally think of — things like transportation, rail, repairing roadways,

power plants, water systems, which I'll get into in a moment — the other aspect is cities. Now, India has committed itself to building scores of new cities across the country. Russia has created science cities. The United States — imagine the potential, not to keep adding more and more sprawl to the outsides of our current cities, but developing legitimately new

cities, actual cities, planned in a sensible way, with part of a

transportation backbone underlying it, with infrastructure that's

needed, canals and aqueducts as necessary, water, power, that sort of thing. But then also where the cities and where life is

oriented around the most key of economic processes — the creation of wealth by improving the productive powers of labor,

by the cultural role that can be played by a city. So in addition to the ability to move goods and people easily, the density you find in a real city, where different members of the household can do their various things that anyone

having an hour and a half commute can't, you also have the other

role of the city itself as a social institution.

So, in a very interesting article that LaRouche wrote some decades ago, in a program for the development of Africa, he discusses the central role of the city, and the presence of a research and educational complex, a pedagogical museum where people, kids, their parents, etc. would be able to step themselves through how discoveries had been made in the past in a

hands-on way, doing experiments, themselves witnessing and understanding very directly how humanity has gotten where it is,

making it possible to have workers able to master new technologies, and scientists able to reflect on what science has

done in the past, to create the new discoveries needed in the future.

This sort of educational center of the city will be more than a museum retailing the past; it will be more than looking backwards. LaRouche wrote that to give vitality and direction to

the process, the educational zone of a new city must be engaged

in some aspect of scientific research which is itself of world importance. He says that "a modern nation has achieved true sovereignty in spirit, only if it achieves excellence in some important aspect of advancement of human knowledge generally.

Α

people which can point to several institutions of its own nation,

and can identify several important contributions to human knowledge associated with such institutions, is a people which knows that its children are capable of equalling in importance to

humanity, the children of any other nation. To teach science is

to teach the principles of discovery."

So, with cities, with this as an included basis, cities of finite size (no more than one or two million people), with the

development made potential by rail, by water, by developing fusion power on a crash basis, and implementing the already-discovered abilities which have been improved on building

nuclear fission plants, we'll be able to dramatically increase the power, electrical power, available in the nation; to power transportation; to power manufacturing. And to do all of this, we're also going to need revival of machine tools themselves. Now, machine tools — now not everyone's actually seen one of these in person. These are things like lathes, like mills, shapers — these are the devices that make everything that's required, that create metal, that shape metal to do machining. To

the extent that you are able to innovate in this area, as has been done with new technologies over the decades — like electric

discharge machining around the time of the Apollo program, or electron-beam welding; or the more recent developments of laser

and plasma cutting, and the ability for these computercontrolled

machine tools to create things that would have taken ten times longer in earlier eras: to the extent that this technology improves, and to the extent that purchases are made, and as part

of an industrialization, the capital stock is increasingly of newer, and more productive machine tools, the entire economy sees

the benefits from them, by making easier, reducing the cost, of

all other production.

So, this machine tool principle is, in the small, an image of what it means to take discoveries and then implement them

into

an economy, for new thought, new engineering, or scientific idea,

to become manifest in the economy. And this is a field that needs

motion on. As I said earlier, power; fusion research, which has

been starved of funding deliberately for decades, preventing the

kind of breakthroughs that would make power, as has been said, too cheap to meter — or even if not that cheap, remarkably abundant power able to bring the next generation of production technologies into play. To transform our relationship with raw materials, and with reshaping those materials. Things like the plasma torch.

So, in this kind of economy, we can then re-approach such subjects as water. California is in what's called a water crisis,

despite being right next to the Pacific Ocean. Why do we not have

the power and the plants in place to be able to desalinate? To at

least provide for much of the needs in California? Why have we not done more research on how weather actually functions? You know, one of the ironies of the global warming alarmists, hysterics, whatever you want to call them, is that this supposedly scientific outlook is actually stifling science.

Hypotheses about what's causing climate change over time, hypotheses about how cosmic radiation coming from our Galaxy, or

even beyond, plays a role in creating the cloud condensation nuclei to form clouds, to effect precipitation, to change the albedo, the reflectants of the Earth, and therefore its temperature — that's real science that's being held back by the

global warming mafia, who reject this kind of approach because

doesn't come to the conclusion that they want: namely, that human-made CO2 is {the} determining factor in global climate. It's just not true.

So, as was said in that resolution I read at the beginning, and as is covered in this other EIR special report, "Global Warming Scare is Population Reduction, Not Science," the science

is clear. We are not causing catastrophic warming of the planet.

Mankind is not a virus destroying the Earth. What is destroying

the planet is oligarchism; the outlook that human beings are a disease, the anti-growth and enforced poverty promoted by the City of London, by Wall Street, by that system which has to be removed. In its place, as far as an actual concept of humanity,

let me read another quote from LaRouche here. He says, "Every infant born in any part of the world has the potential for development of his or her mental powers to the level sufficient

for adult competence in use of modern technology." And this also

means real technology, not iPhones. "That child can achieve at least an approximation for practice of the highest levels of productive powers of labor in the world generally today. It is that potential development which is the only source of wealth."

Let's remember that; the source of wealth, the increasing of the

productive powers of labor, as Hamilton put it, lies in that ability for human beings creatively to develop new understandings

about nature, and thereby reform the economy in an entire way. That's real economic science, and with that approach, the programs that are needed, the development projects which we can

implement, the jobs that will create; this can all follow from an

outlook of what economics truly is, and breaking free from the false ideas about it which have been promoted by Wall Street and

which have affected, unfortunately, a very great number of our fellow citizens.

BEETS: Thanks, Jason. Two days ago, on Wednesday of this week, we celebrated the 100th anniversary of Einstein's publication of his paper on general relativity. Now, LaRouche has

reiterated many times in the recent period that Einstein was the

only true scientist in the 20th Century; someone who held out against the corruption in thinking that was ushered in 1900 by Bertrand Russell. And someone who was attacked and isolated for

his commitment to the paradigm of thinking which represents the

actual human mind; the paradigm which was responsible for all of

human progress up to this point. So, what I'd like to do is ask

Jason to come back to the podium and ask him this question: Given

the task ahead of us today to rebuild society, rebuild civilization, and to create a new paradigm for mankind, I'd like

to ask Jason to give us a sense of the importance of Einstein's

work and his commitment.

ROSS: Sure. I think what Einstein accomplished represents a key concept under which science can be understood; that of metaphor. LaRouche has repeatedly stressed the importance of metaphor as the key to science; meaning the development of

language in such a way that you express a new scientific truth in

a way that could not even have been stated in the preceding language. It's not something mathematical; it's not a formula or

an expression. Discoveries in their true form can't be. After the

fact, you might be able to write them down; but what makes them a

discovery is an overthrowing of the past, the development of a new basis for thinking incompatible with what came before. That's

the kernel of what a discovery is. None of these thoughts are really eternal; what is, is that process of developing new ones.

Which is the incredible error in science education today, based

upon understanding how to apply the fruits of discovery to specific problems; but not going through how they were developed.

So, 100 years ago, 1915, Einstein successfully expanded his special theory of relativity, which he had developed in 1905, into a more general form; making it the general theory of relativity. So, I do want to say a bit about what Einstein did; I

think it would be wrong not to; and then get into what it would

mean for us today, what's the relevance. Einstein's not just someone to idolize, or say, "Wow, he was a real genius." Figure

out what he did.

So, going back ten years earlier to 1905 — 110 years ago — Einstein, in his what's now called special theory of relativity,

changed the basis on which scientific thought was based. At that

time, the prevailing view was of a Newtonian outlook to space

and

time. Isaac Newton had said that space and time were independent

of things within them; space is space, within it, things exist and take place, or occur in different relations to each other. According to Newton, time flows on its own, without reference to

the things in it; they take place over time, but time is an independent existence.

Well, Einstein tore that apart in 1905; in some ways with rather simple thoughts. For example, he demonstrated that the concept of simultaneity does not exist; that depending on who it

is that you ask, and their motion with respect to two events that

are occurring, that observer might say yes they occurred at the

same time. Meaning the light from those two events reaching them,

to make a determination which one occurred first, or second, or

whether they occurred simultaneously, depending on the motion of

an observer, they might appear to occur at the same time or not.

He gave the example of someone on a train witnessing two lightning bolts, versus someone on the ground witnessing two lightning bolts. To someone on the ground, two lightning bolts

occurring at equal distances in either direction, the light will

come and reach the person at the same time. To someone on a train, who is at the middle of that platform right when the bolts

occur, at the same time according to the person on the platform,

because of the train's motion, they're going to see this bolt

before the other one. Who's right? What does it really mean to say "at the same time"? Because all the laws of nature work the

same, whether you're standing still supposedly, or you're in constant motion, there's no way to say who's right; what the right time should be. And the idea of having a universality of simultaneity, to say "at this moment in the universe" disappears,

and it becomes relative to the observer.

What does that mean? It means that time itself no longer exists as a basis for thought in the way that it had before. There's still time, but it's no longer an untouchable permanence;

the same thing is the case for space. Where space and time are skewed, and distances have to take place or be considered in space-time, rather than in only one or the other. So, by then, by

1905 in his special theory of relativity, Einstein had replaced

the concepts of space and time as a basis for physics with something physical; light's motion. In this way, he was implementing the revolutions in physics that Riemann said would

take place; that our understanding of geometry would take place

not by looking at geometry, but by an understanding of those binding forces of nature which give rise to what is then observed. A bent space; a curved space; a skewed space. With his general theory of relativity in 1915, Einstein went beyond frames of reference which are either at rest with respect

to each other or in uniform motion; and he considered acceleration. He considered the fact that there is a relativistic

equivalence between somebody in a room where they feel the floor

pushing up against their feet, or their feet pushing down

against

the floor, that without reference to what's outside that room, they might be sitting on the Earth, or they might be out in space, where the top of the building is attached to a rope which

is being pulled at an accelerating rate, constantly pulling the

building up against their feet. No experiment, nothing you could

do inside the room, would be able to distinguish the one from the

other. From this equivalence then, Einstein derived his general

theory of relativity, by which not only motion, but gravitation

changes the shape of space and time.

This was a very, and still is, a very wild shocking idea.

Space and time were considered to be such fundamental things that

the possibility of them even being curved was rejected out of hand by people like Immanuel Kant, Isaac Newton, Bertrand Russell.

So, what Einstein was able to do, though, is demonstrate that he was right. Two quick examples. One was the orbit of Mercury. Every orbit, every planet, has a place that's farthest

from the Sun, and one where it's closest to the Sun. You draw the

line through them. That line for the orbit doesn't stay stationary. It actually moves over time. For Mercury that line moves a degree and a half every century. And based on calculations and gravity, as it was understood, people were able

to explain almost all of that change. There remained a very, very

small - about .01 degree per century - change in Mercury's
orbit that no one had explained, but which Einstein was able

to

explain with his theory.

Also his prediction about how light would bend going around large objects, was borne out in the experiments around the eclipse of 1919, in which photographs taken of stars near the eclipsed Sun — since the Sun was covered, you could actually see

stars near the Sun, which you can't ordinarily do in the daytime,

because you can't see anything — and comparing those same stars

when the Sun was not in the sky near them, showed again that Einstein was right; that the path of light coming from the stars

towards us was deformed, was shaped, by the presence of the Sun

in the way.

So, these are the things that people are most familiar with about Einstein, things that are indisputably advances that he made. But there's more to him than that. I think that the great

importance that LaRouche attributes to him in what Megan was bringing up about calling him the only scientist we had here in

the Twentieth Century, the only one who stuck to science, lies elsewhere as well.

The other great work that Einstein had done was on the quantum. So in 1905, in addition to Special Relativity, he also

wrote a paper to explain the photo-electric effect, and it was actually this that got him his Nobel Prize later. This expanded

the theories of Planck in showing how light itself must come in

pieces: that it's not purely a wave phenomenon; that there's something particle-like about it. Experiments, however, required

light to also have wave-like properties, making it impossible to

in a simple way decide on this question. Is light a particle, or

is light a wave? This is one of the difficulties of quantum physics.

What Einstein held out against was the interpretation by scientists in his day, led by Bohr, mainly, Neils Bohr the Dane,

to say that science had reached a limit; that to ask why was really no longer admissible, and that in the quantum world, physics, instead of saying what nature is, is limited to describing how nature appears. Against that Einstein — Einstein

would not accept that. Einstein never accepted the idea that we

had reached an end to the ability to know things, and that quantum theory as it was known at that time, was final, complete.

Something that's never been true of, really, any theory in history.

This is seen now with the ongoing difficulties around completing quantum theory, and also the anomalies in the fields

of life and the potential for a higher understanding of these quantum processes in the fields of cognition. It's also seen in

his own work, with the theory of gravitation; with the difficulties — I hope you've been watching the series of presentations our colleague Ben Deniston has been doing on the Galaxy on this website every other Wednesday — it's also seen in

the difficulty in understanding the speed of rotation of galaxies. The basis for hypotheses that people make about dark matter now. A lot of what this can indicate is that we have simply reached the limits to the applicability of our physical theories, and need to go beyond them.

That's not done mathematically by positing ways to keep our old laws, to explain the new phenomena, but it can require going

beyond it.

So, we don't have answers to these questions. We shouldn't fool ourselves into thinking that we do already have the answers

to these questions. And the importance of Einstein for us today,

is that of a successful discoverer who overthrew what had been thought, developed a higher theory to explain things, and was guided by an understanding of the role of the human mind in developing new, successful concepts about nature. With that as a

basis for how we relate to other human beings, with that as a basis for social relations, we can forge a much higher level of

cooperation on this planet, and develop a culture that's really

suitable for human beings that participate in it.

MEGAN BEETS: Thank you very much, Jason. With that, I'm going to bring our broadcast to a close. I would like to thank Jason for joining me, and Jeff for joining us via video, and I'd

like to thank all of you for watching tonight. Please stay tuned

to larouchepac.com. Good night.