

THE HAMILTONIAN

RUSSIA—U.S. ALLIANCE FOR MANKIND

The Next Step is Glass-Steagall

By MICHAEL STEGER

Never before has mankind been faced with such potential. Despite the hysterical, Nazi-imitation tirade against Russia and Vladimir Putin currently pervasive on American mainstream news, the American people have been captured by a higher sense of truth, one far above the cult-like adherence to popularly accepted wrong opinions that has predominated our nation's policy for the last 16 years. The Russian-American alliance which is now developing with the incoming Trump administration is of the greatest importance to mankind's long term happiness.

On Saturday, January 7, 2017, the date for the Orthodox Christmas, the Schiller Institute Chorus, along with NYPD Ceremonial unit led by Lt. Tony Giorgio, the Bayonne Fire Department, plus representatives of the U.N. Russian Mission, 9/11 Families & Survivors United for Justice Against Terrorism representative Terry Strada, and other civic groups and leaders, congregated at the little known, but heart-felt Russian-donated, tear-drop memorial located on the dry docks of Bayonne, to honor the Russians artists and others who tragically died in a plane accident on their way to Syria on December 25, 2016.

Among those who perished were several very promising, young journalists; the plane crew; a very well-known humanitarian doctor, Dr. Elizaveta Glinka, who was on her way to Syria to bring medical

Mrs. Helga Zepp-LaRouche, Chairwoman of the Schiller Institute, provided this statement on the occasion of the January 7th memorial event:

"Putting the relationship between Russia and the U.S. together is the most important precondition for solution of all other problems in the world. If there is no peace between U.S. and Russia—and more than peace, friendship and a spirit of cooperation—the world is in existential danger. Thus, the hopeful potential which exists with the incoming American President to go in this direction, is the most important precedent for everything else. Today's Bayonne, N.J. event, which the Schiller Institute is proud to contribute to, is meant to be a first step to demonstrate this spirit of solidarity, friendship and humanity."

The contributions of the NYC Schiller Institute Chorus began the proceedings with the Russian National Anthem, which was composed by the Alexander Alexandrov, as well as the American National Anthem, with the NYPD, Bayonne Fire Department, and American Legion providing the national flags. The comments which followed from the various participants express the true quality of American identity, and are the sentiments which must propel our new government forward.

In order of presentation:

First Deputy Permanent Representative of the Russian Federation to the United Nations, Mr. Petr Ilichev: "It's helpful when you're grieving, and you are not alone, your friends are around to offer you their compassion, their heart-warming solidarity. We value very much your sympathy and your solidarity."

"It's said that when words fail, music speaks. Arts and culture are meant to bring peace to people. So once again, I'm very grateful for Schiller Institute Chorus for what they have done, and all of you who are present here. Thank you."

Mrs. Terry Strada of the 9/11 Families: "Tragedies like this can bring a nation together. Today, it is bringing two nations together, and I hope you find comfort in knowing we feel your pain and mourn your loss, too. Russia wanted us, the American people, to have a memorial for the fallen heroes and the citizens lost and killed on

9/11, with a tear-drop, representing that the world cried with us. Thank you for your kindness and support. Today we offer you the same. Thank you."

Capt. Don Haiber of Training Unit of the Bayonne Fire Department: "In the darkness after 9/11, this monument helped to bring hope and light to the many people who visited here. It is now our turn to repay that kindness back to Russia. This small token of our sympathy, hopefully, will bring a touch of hope and light back to the Russian people."

"On a personal level, I'm honored to be here today, as I was actually at the Ground Zero, working with my brother firemen for a few days. And may the peace and hope that I feel when I am here be conveyed back to your country. It is at times like this that we are neither Americans nor Russians, but we are human beings who feel loss and genuinely wish peace and happiness to one another."

Lt. Tony Giorgio of the NYPD Ceremonial Unit: "As Mr. Ilichev said, sometimes the words fail, but the music never fails. And even though we spoke two different languages, we spoke the universal language of music which always gives us hope, comfort, and peace, and that's all we want in this world—those three things."

Diane Sare, Conductor of the S.I. Chorus and a member of the LaRouchePAC Policy Committee: "The loss of the chorus was particularly great, because as everyone who sings in a chorus knows, the combination of our voices is greater than each of us individually, or each of us added up as parts. Each and every one of us is going to die. But we hope that mankind will be immortal. If we can each think of ourselves as unique voices in a great chorus which stands across generations and across continents, then the universe will resound with the beauty of mankind."

It is noteworthy that President-elect Donald Trump, who has been under increasing pressure to conform with the Russian hysteria coming from the Wall St.-dominated political establishment, responded on this same Saturday morning during the event in Bayonne with one of his characteristic tweets:

"Having a good relationship with Russia is a good thing, not a bad thing. Only 'stupid' people, or fools, would think that it is bad! We have enough problems around the world without yet another one. When I am President, Russia will respect us far more than they do now and both countries will, perhaps, work together to solve some of the many great and pressing problems and issues of the WORLD!"

A Russian-American alliance is the first step towards a new world order based upon



Members of the Bayonne, NJ Fire Department Honor Guard and the NYPD Ceremonial Unit Color Guard at the Russian-donated "Teardrop" 9/11 memorial in Bayonne, NJ.

universal human development. The next step for the Trump administration, and our renewed federal government, is the immediate reenactment of Glass-Steagall legislation.

Petitions are now circulating calling for President-elect Trump to again call for this

legislation during his Inaugural or State of the Union address, including the petition printed on page 2. Such action would be a signal to the world that the true United States, the one of Lincoln and LaRouche, is once again acting upon the great stage of history for mankind's benefit.



The Schiller Institute chorus performs the Russian and U.S. national anthems.

supplies to the Syrian children; and the entirety of the Red Army Chorus, or the Alexandrov Ensemble, with all sixty-four members plus their director.

It was this same chorus which performed a heart-warming version of "God Bless America" in 2011, on behalf of the NYPD at the tenth anniversary of the terrorist attacks on 9/11, held in Quebec. The Russian baritone soloist, Grigory Osipov, who lead the performance of this American patriotic song, is one of the sixty-four who perished in the Russian Tu-154 plane which crashed this past Christmas morning.

A Fond Farewell to Russian Heroes, who died for the Cause of Peace on December 25, 2016

Presented by Senator Richard H. Black at Bayonne, New Jersey

January 6, 2017

I pray for the families of those Russians who perished last Christmas, while flying to spread beauty to Syria—a land torn asunder by evil schemes of foreign powers.

How appropriate that the renowned Alexandrov Ensemble is honored at this place by the Schiller Institute Chorus, singing both the Star Spangled Banner and the Russian National Anthem, at a wreath-laying for the victims of the air crash. The American and Russian choirs shared a dedication to restoring civility, by appealing to the higher intellect. Their legacy will live on.

The Tear Drop 9-11 Memorial was a gift that Russia gave Americans to honor the 3,000 Americans slain by al Qaeda on 9/11. That monument was inscribed "To the Struggle against World Terrorism." How fitting that we honor men and women who gave their lives in that struggle. Their gifts contributed greatly to peace and harmony among men.

This event comes at an historic mo-

ment in Russian-American relations—an exciting time of joint commitment to civilization, religious freedom, and the restoration of world peace. I am grateful that Russia stepped forward militarily; carrying the burden of confronting world terrorism, while much of the world chose a darker path.

Tomorrow's American leadership gives hope that the world will step back from the provocative actions propelling us toward a world war that neither Americans nor Russians wanted. May God grant peace to the nations of the world.

And may the souls of the faithful departed, through the mercy of God, rest forever with Him.

Richard H. Black
Senator of Virginia
13th District



America Must Become Promethean Again! Ignite the Power of Fusion Energy

By MEGAN BEETS

"Out of our laboratories may come a discovery as important as the Promethean taming of fire."—Atomic Energy Commission Chairman Lewis Strauss, 1958

Did you know that alongside the breathtaking achievements of our 1960s space program, and in the same spirit of optimism for the future of mankind, the U.S. had a vigorous program to achieve nuclear fusion—a process which fuels the Sun—as a power source, with a commitment to making it happen by the 1990s?

As was obvious during those decades of

optimism and growth, the leap to fusion power is not an option for humanity, but a necessity for our continued progress.

By the 1990s, fusion scientists had created gases at temperatures of 500 million degrees (25 times hotter than the center of the Sun), invented new materials and methods to contain and control these gases, and in their experiments had wielded power equivalent to that flowing through the entire nation's energy grid. When the immense powers and potentials of fusion are no longer contained in laboratories, but are widely disseminated through all sectors of human work and life, we will have made a leap upward to an entirely new platform of development.

Today, the potential of controlled fusion stands before us as a breakthrough imminently achievable within the new world paradigm of "win-win" cooperation now emerging under the leadership of Chi-

na and Russia. For decades, within the now-collapsing paradigm of the transatlantic system, the cynical line has been, "fusion is always 50 years away." Now this lie is falling away, and we stand at the brink of a renewed optimism around mankind's ability to overcome any challenge.

In Part I of this article, "Return to the Road of Infinite Progress: Revive a Crash Program for Fusion Power" published in this paper, we covered the elementary principles of creative growth that distinguish man from all beasts, and demand our continuing breakthroughs to more and more energy-dense modes of power (e.g. chemical fuels, to nuclear fission, to fusion).

Here in Part II, we will examine why there is great potential today to organize humanity to conquer fusion, starting with important developments of the past 12 months in Europe and Asia, as well as the promising recent achievements of the U.S. program,

despite its crippled condition.

Fusion is—and always was—an International Affair

As was recognized from the 1950s' beginnings of fusion efforts in the U.S., the Soviet Union and Europe, full mastery of the atomic nucleus, put to work for mankind, would not just be a victory for one nation, but would revolutionize our species as a whole, giving it seemingly limitless potential.

The Head of the Indian Atomic Energy Commission, Homi J. Bhabha, who presided over the first international conference on fusion in 1955, said in his presidential address, "I venture to predict that a method will be found for liberating fusion energy in a controlled manner within the next two decades. When that happens the energy problems of the world will have been solved forever, for the fuel will be as plentiful as the

heavy hydrogen [deuterium] in the oceans."

There are many challenges to be overcome as we tame the fire of fusion. A fusion reaction is the uniting of two light nuclei (e.g. hydrogen) into one, which results in a tremendous release of energy in the form of electromagnetic radiation and high-energy particles. We can capture that energy to produce electricity, heat for industrial processes, and many other advanced applications, such as rocket propulsion.

In the most basic terms, for two nuclei to get close enough to fuse, they must overcome the Coulomb barrier, created by the tendency of two similarly-charged particles (in this case, the positively charged nuclei) to repel one another. This requires a tremendous input of energy. A successful, energy-producing fusion reaction—one which yields more energy than was required to bring it about—requires that the

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PETITION // President-elect Trump— Commit to Glass-Steagall by SOTU

The following petition was originally drafted by a group entitled “Our Revolution in Northwest Ohio.” With their commitment to unify the entire nation, they have issued a call to all groups, e.g. the “Tea Party, Republicans, Democrats, Labor and Business,” to rally around the necessary first step of passing Glass-Steagall legislation. Their effort is consistent with the aims of LaRouchePAC, and we are circulating this

as part of a national mobilization for the immediate passage of Glass-Steagall legislation by the House and Senate, to be signed into law by President Trump.

In addition to the reinstatement of Glass-Steagall, LaRouchePAC is calling for the full implementation of LaRouche’s Four Laws: 1. Reinstatement of FDR’s Glass-Steagall banking separation, 2. Return to a Hamiltonian System of national banking, 3. Invest

federal credit for productive employment, and 4. Launch a crash program for fusion power. These four laws, as laid out in a resolution recently passed by the Illinois State House in June, 2016, are the four critical steps to rebuild the American economy.

We are asking every citizen to rally around this economic program with the greatest urgency. These four laws are the only effective way to address both the dire

economic and financial crisis after decades of destructive policies, as well as activate the potential for great development, as we now see throughout Asia with China’s New Silk Road Initiative.

Sign this petition. Share it with your friends, family, and networks. Each signed copy will be hand delivered to your Congressmen and Senators. If you are the head of an organization, issue a similar challenge to President-elect Trump. If you are an elected official, introduce legislation similar to the bold call from the Illinois State House. A PDF of this petition can be found here.

As President Franklin Roosevelt stated at his first Inaugural Address, “This Nation asks for action, and action now!”

Open Letter to President Donald Trump and to all Members of Congress:

January, 2017

We the undersigned strongly feel the need for protecting our economy from another unnecessary market crash and recession like the one experienced in December of 2007. As you take office, the conditions for a collapse are too similar to those of 2007: rising asset values together with a lack of separation between FDIC insured banking and risk-investment brokering.

We applaud President Trump’s campaign statement in Charlotte, North Carolina,

October 26, 2016, endorsing a call for “A 21st Century version of Glass-Steagall,” and reintroducing a modern day Glass-Steagall Act. We trust that you understand that stabilizing the business climate and securing the assets as separate from Wall Street speculation is a key to prosperity during your administration.

To set the tone of discourse in Congress 2017, we ask that President Trump restate his support for a Glass-Steagall Act during the State of the Union address.

Be assured in doing so, you will find common ground with both the Republicans and the Democrats since both party platforms have the support of banking legislation that separates insured accounts from Wall Street speculation in their respective platforms.

Thank you for responding to the call from citizens, businesspersons, bankers and legislators as we move forward.

We urge that the Glass-Steagall legislation be passed by both the House and Senate of the U.S. Congress, and signed into law by incoming president Donald Trump. We also ask that the entire four laws of economic development also be implemented during the first 100 days.

Sign the Petition
lpac.co/trumpsotu



“American Recovery Program” • Illinois House Resolution 1092

ADOPTED JUNE 30, 2016

Synopsis

Urges the United States Congress to immediately adopt an “American Recovery” program by restoring the provisions of the Glass Steagall Act; returning to a national banking and a federal credit system, modeled on the principles of Alexander Hamilton’s First Bank of the United States; using the federal credit system to build a modern network of high speed rail, power generating systems, and water projects; and creating programs to rebuild our space program to put a permanent manned colony on the Moon, explore the solar system, and create nuclear fusion.

Resolution

Whereas, The prices of commodities— from oil and copper to coffee and corn— have declined by 10-70% per commodity over the past year as measured in the Dow Jones and Bloomberg Commodity Indices; the price of oil has fallen 70%; this price collapse is now creating a new crisis; and

Whereas, The collapse of commodity

prices is the new “subprime mortgage” crisis of 2016; the commodities and their related financial paper are tied to a \$300 trillion derivatives bubble in the major banks and other companies in the U.S., and far more internationally; it was the derivatives meltdown that set off the 2008 financial collapse; and

Whereas, This new financial crisis is being driven by a collapse of our industry and infrastructure; November and December, 2015, U.S. Commerce Department durable goods orders fell by 1.1% and 5.1% respectively; mass layoffs are increasing, highlighted by the announcement of 10,000 layoffs at Caterpillar and 200,000 layoffs in the oil fields; the Institute for Supply Management Manufacturing Index has contracted for 4 straight months nationwide; and

Whereas, A return to a durable recovery will require adoption of national credit and national banking policies as was done by Alexander Hamilton, John Quincy Adams, Abraham Lincoln, Franklin D. Roosevelt,

Dwight Eisenhower, and John F. Kennedy; the program of federal credit to industry, states and cities built the industry and agriculture of our nation; and

Whereas, National credit, under this Constitutional program, can be made available for the creation of productive jobs in infrastructure, manufacturing, and high technology projects, thus creating mass employment for our now heavily unemployed and underemployed workforce, especially young people; therefore, be it

Resolved, by the House of Representatives of the ninety-ninth General Assembly of the State of Illinois, that we urge the United States Congress to immediately adopt the “American Recovery” program by doing the following:

1) Restore the provisions of the Glass Steagall Act, and pass HR. 381 in the U.S. House of Representatives and S. 1709 in the U.S. Senate, which aim to immediately restore the separation of investment and commercial banking; Glass-Steagall in the U.S. House has 4 Illinois Congresspersons

co-sponsoring, and was law for 66 years; it prevented banking crises like the one experienced in 2008;

2) Return to a national banking and a federal credit system, modeled on the principles of Alexander Hamilton’s First Bank of the United States, which built all the infrastructure of the nation for the first 40 years; it was reinstated as Illinois native son Abraham Lincoln’s National Banking-Greenback policy that built everything from railroads to steel mills; Lincoln was the architect of the Transcontinental Rail System that built America, and as a State Legislator he was a leading sponsor of internal improvements and water projects here in Illinois; nationally, Lincoln was a leading advocate for a new National Bank; the same credit policy was embodied in Franklin Roosevelt’s Reconstruction Finance Corporation, which financed the New Deal infrastructure program; for example the Works Progress Administration was financed by RFC and employed tens of thousands of Chicagoans of all ethnic

backgrounds in productive jobs; Ronald Reagan’s father, Jack, was the director of the Works Progress Administration in Peoria;

3) Use the federal credit system to build a modern network of high speed rail, power generating systems, water projects, such as those urgently needed in the Southwest and cities like Flint, Michigan; Chicago; Philadelphia; and others nationwide; and other critical programs; and

4) Launch a program to rebuild our space program to put a permanent manned colony on the Moon and explore the solar system, and develop a program to create nuclear fusion, to finally solve the energy needs of the nation and the planet; the University of Illinois at Urbana-Champaign is actively involved in fusion research; and be it further

Resolved, That suitable copies of this resolution be delivered to President Barack Obama, U.S. Speaker of the House Paul Ryan, U.S. Senate Majority Leader Mitch McConnell, and all members of the Illinois Congressional Delegation.

Ignite the Power of Fusion Energy

Continued from page 1

fuel is confined at a high enough density and temperature, and for a sufficient time, such that the energy being given off heats the fuel without further external input. In the process of trying to make this happen, plasma instabilities and other surprising behaviors of the fusion fuel have disobeyed our mathematical formulas, and challenged our assumptions about the characteristics of matter and energy.

Today, stunning new breakthroughs are being made by the impressive fusion efforts which have been developed around the world. If a vigorous crash program of international cooperation were initiated within a new win-win paradigm, we could finally bring to fruition what the old system had placed “always 50 years” beyond our grasp.

Leadership in the EAST

China, which began its fusion program in the 1970s, has developed one of the world’s only tokamaks (a type of fusion machine) that uses advanced superconducting magnets, the Experimental Advanced Superconducting Tokamak (EAST) housed at the Institute of Plasma Physics in Hefei. China is the only nation today which is increasing its domestic fusion budget, and it has the intention of graduating 2000 fusion scientists by 2020 (there are currently more than 300 master’s and PhD students studying fusion in Chinese universities).

In the recent 12 months, work at the EAST facility has made important progress,

and the insights gained from this work can benefit fusion research internationally.

In February 2016, it was announced that with recent upgrades, scientists were able to maintain a plasma in the EAST tokamak at 50 million degrees (over twice the temperature of the Sun’s core) for 102 seconds,² setting a new record for plasma creation. The goal is to sustain a plasma for 1,000 seconds, at twice the temperature. Professor Luo Guangnan, deputy director of the EAST project, said, “It is a milestone event, a confidence boost for humanity to harness energy from fusion.” In November of 2016, another record was set, maintaining a plasma of 50 million degrees for 60 seconds in a “high confinement mode,” nearly double the previous record.

Both of these recent milestones are exciting and necessary advances, and they were not accomplished alone. Scientists in the U.S., at General Atomics in San Diego, collaborated with their Chinese colleagues on the experiment, and have even begun operating the tokamak remotely for a “third shift,” during the nighttime in China.⁴ The cooperation is viewed as very valuable on both sides. “We have made a very good start of international collaboration in fusion research between China and the U.S., and we are very proud to be a pioneer in this field,” said Dr. Xianzu Gong, of China’s Institute of Plasma Physics.

The recent achievements have bolstered confidence to move forward with the next step toward fusion energy, the Chinese Fusion Engineering Test Reactor (CFETR), for which approval is expected in China’s

2. Being able to maintain the plasma in a steady state is necessary for electricity-generating and industrial applications.
3. High confinement (or H-mode) is a more advanced state of the plasma which is possible to achieve within a tokamak or stellarator, in which the confinement time is significantly enhanced.
4. <https://conferences.iaea.org/indico/event/98/session/31/contribution/55.pdf>

next Five Year Plan. This facility would be dedicated to solving the remaining engineering challenges, such as the need for new materials, before moving ahead with a demonstration power plant. The CFETR could come online as early as 2025.

Promising work is emerging in other parts of Asia. For example, in December 2016, a record of 70 seconds of plasma high-density mode operation was achieved in Korea’s KSTAR tokamak, breaking its prior record of 55 seconds, set in 2015. KSTAR is the world’s only other advanced superconducting tokamak, and began operation in 2008. Major upgrades to KSTAR are planned over the next few years, intended to allow work that would lead to a demonstration power reactor, KDEMO.

Both of these programs, as others, have been carried out with significant international cooperation, and scientists from all over the world have contributed their work and insights toward this wonderful common effort.

Achievements in the West

Alongside the ongoing disintegration of the system of geopolitics and Wall St. in the West, which has held back scientific progress for decades, glimmers of real optimism appear in the fusion laboratories of Europe and the U.S.

At the Max Planck Institute for Plasma Physics in Greifswald, Germany, scientists and students completed the construction of the Wendelstein 7-X, the largest stellarator in the world, in 2014. The stellarator is a design for a fusion machine based on a different concept than the more common tokamak, i.e. imagine a twisted tokamak, and may avoid many of the plasma instabilities which challenge the basic tokamak designs.⁵

5. The stellarator was first conceived in the 1950s by Lyman Spitzer at what is now the Princeton Plasma Physics Lab (PPPL) in Princeton, NJ. PPPL currently does not have a stellarator in operation, though they

In February 2016, the Wendelstein 7-X began its experimental operation, and in December released a report that the very complicated geometry of its stellarator is accurate to within 1 part in 100,000. The analysis of Wendelstein 7-X stellarator’s geometry was completed with collaboration from the U.S. and other fusion programs, all of which show great excitement at what can be learned from this unique approach.

Finally, in the U.S., though decades of budget cuts have crippled the momentum of a very promising national effort, fusion work has continued in our National Labs and universities and in recent months has underscored the crime of denying adequate funding to our program.

On September 30, the last day of its operation due to budget cuts,⁶ the Alcator C-Mod tokamak at the Massachusetts Institute of Technology set a new world record, achieving a plasma pressure (one of the key parameters in an energy-producing fusion reaction) of 2 atmospheres, surpassing its own previous record. The Alcator device, a high-magnetic field compact tokamak, is of a unique design, and could be readily restarted with restoration of funding. Dale Meade, formerly of PPPL, said of the work, “This is a remarkable achievement that highlights the highly successful Alcator C-Mod program... The record plasma pressure validates the high-magnetic-field approach as an attractive path to practical fusion energy.”

The Alcator C-Mod is joined in a shutdown state by the second of three major fusion devices in the U.S.: the National

have a nearly-complete one which awaits a mealy \$100 million to be assembled and put into operation.

6. “We wouldn’t need to invent some fancy new fusion energy or anything...” Barack Obama, September 13, 2010. Under Obama’s administration, funding for fusion was cut again and again, finally forcing the shuttering of many valuable research programs.

Spherical Torus Experiment (NSTX-U) at PPPL, which had to stop operations in July 2016, when a magnetic coil shorted out. This leaves the DIII-D tokamak at General Atomics as the only major operational fusion device in the U.S. A sane and moral U.S. president would restore funding to the Alcator C-Mod immediately, and mobilize to facilitate rehabilitation of the NSTX-U as quickly as possible.

Out of necessity, more and more U.S. fusion scientists are turning to international fusion facilities to exercise their talents. Though international cooperation is indispensable, the U.S. has a deep and revolutionary history in contributions towards conquering fusion, and in the context of joining the new paradigm now emerging in the world, we must immediately restore full funding to our own domestic fusion efforts, that we might maximize humanity’s resources in this critical endeavor.

Fusion for All Mankind—On the Earth and Beyond

As the world undergoes a profound and revolutionary realignment, and a new paradigm of “win-win” cooperation begins to take shape, humanity has a renewed opportunity. Nations are being brought together to pursue the common aims of mankind for the mutual benefit of all, supplanting the ideology of the imperial system of globalization which has held back mankind’s progress for decades. A vigorous effort to conquer the atom and fully utilize its potential to uplift our species must now be revived as a number one priority.

But these efforts will not take place on Earth alone. The higher potentials of controlled fusion will not see their full manifestation until we leave the Earth and begin to industrialize the Moon, and other bodies in our Solar system. Fusion is an indispensable part of an extraterrestrial platform.

In Part III, we will see what the Moon can offer mankind in our mission to wield the powers of fusion.