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LPAC Talks with Experts About NAWAPA
U.S.-Russia Breakthough in War on Afghan Drugs
FDR's Measures Worked! LaRouche's Will Work Today

The Election Decided Nothing; The U.S. Needs Leadership Now

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EIR

From the Managing Editor

While the Nov. 2 midterm election settled exactly nothing, in terms of shifting the direction of the country away from the edge of the abyss, it clearly sounded the deathknell of the doomed Obama Administration. More important than Tuesday's vote will be what Lyndon LaRouche has to say on Saturday, Nov. 6, as he, once again, delivers a webcast address to the nation and the world, on the subject, "After Tuesday," in which he will assess the post-election universe. A preview of his thoughts can be found in our *Cover* story this week, which reports on LaRouche's remarks to the Nov. 3 LPAC-TV Weekly Report.

This is followed by Nancy Spannaus's review, in "LaRouche's Plan Will Do It Today! FDR's Measures Worked To Reverse the Great Depression," of Roosevelt's emergency anti-Depression actions, which are the keystone for The LaRouche Plan. LaRouche "upshifts" FDR's program, with his call for a revival of Glass-Steagall, the rescue of the country's devastated cities and states; and the inauguration of NAWAPA, as the unique requirements to avert a New Dark Age.

NAWAPA is not just a nice idea, sitting on a shelf somewhere, gathering dust. As readers know, LPAC has taken the original plan down from the shelf, dusted it off, and begun to flesh it out, in a series of videos, and discussion with experts. This week, in *Economics*, we present the transcript of a conference call, "LPAC Talks with Infrastructure Experts: NAWAPA—Towards a New Economic Platform," which continues that process.

In *International*, we look at several of the nations that will be impacted by the "Extended NAWAPA" platform: from Russia, an offensive led by its anti-drug czar Viktor Ivanov, which has led to the first Russian-U.S. collaboration against the scourge of Afghan opium. There is also coverage of India, Chile, and Argentina, where we remember the courageous leadership of Néstor Kirchner.

An interview with a courageous young woman, Heidi Mayer, opens our eyes to the reality of Obama's depression: youth who have been abandoned and forgotten, homeless and hungry.

Finally, a tribute to Maurice Allais, the only Nobel Laureate in economics who deserves to be celebrated, and who recently passed away, at age 99, in *Science*.

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Kesha Rogers' brilliant leadership in her campaign for Congress will continue far beyond the election.

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The Election Decided Nothing; The U.S. Needs Leadership Now

by Nancy Spannaus

Nov. 3—The results of the election yesterday decided nothing, stated Lyndon LaRouche in today's LPAC Weekly Report. True, the Democratic Party has been left in tatters, but the Republican Party that is coming in, has absolutely nothing to offer, in response to the actual breakdown crisis engulfing the nation, and the world. Those who are declaring victory are like the leaders of the French Revolution: on top today, and on the way to the guillotine tomorrow.

We cannot come to any conclusions yet as to what the "trend line" is going to be, LaRouche continued. For example, take the contrast between the results in Texas and California. In Texas, a lot of good Democrats were wiped out, because President Obama was seen as the "bad guy," and they were associated with him. In California, it was that son-of-a-Nazi Gov. Arnold Schwarzenegger, who was the hate object, and therefore, the Republicans, who were associated with him, lost the significant contests.

What we know, is that important decisions are going to have to be made soon, but we can't really expect them to surface before the end of the week, after his webcast, LaRouche said. Certain sections of the Democratic Party that represent actual leadership—including LaRouchePAC, and the Clinton grouping—are going to have to decide what moves to make in the face of what, otherwise, looks to be a move toward political chaos.

It's crucial to keep in mind, however, LaRouche stressed, that it is the old Congress, with the Democratic majority, which is still in power until January. Thus, there is a window of opportunity for action along the lines required—specifically, the removal of Obama from office by invoking the 25th Amendment, Section 4; the immediate passage of the FDR-modelled Glass-Steagall bill; emergency credits for the cities and states; and the launching of the grand project which can create 3-4 million jobs immediately, and turn the entire process of devolution around, the North American Water and Power Alliance (NAWAPA).

If certain leaders of the Democratic Party can find the guts to take the necessary action, the nation can be put on the right path, LaRouche emphasized. If not, we are looking at the disaster which the current British Imperial system has put on course, through its adoption of a hyperinflationary bailout, and fascist austerity. Such a policy, which is being ratified by the Federal Reserve Board and the European Union leadership this week, will lead to global collapse.

Inchoate results

While the Republican Party did, in fact, take over from the Democrats as the majority party in the House of Representatives, that is the only summary conclusion that can be made. For the reality is that the winners, as LaRouche emphasized, effectively became the losers, because they will be the next targets of the population's rage. Even the expected incoming Republican Speaker John Boehner had a sense of this in his election

White house/Pete Souza

"Is it safe to come out now?" the President seems to be asking. Yes, through the use of the 25th Amendment, providing for his safe removal from the White House.

night address, when he noted that it wasn't really a night for celebration, when the Congress as a whole has a popularity rating of 11%, and one in ten Americans does not have a job.

What we saw was a whipsaw process, in which voters registered their rage against certain hate objects, in the absence of any positive alternative policy for the nation.

The cases LaRouche focussed on in the Weekly Report were Texas and California. In Texas, Democratic Party officials credit President Obama, who is immensely unpopular in the state, with wreaking havoc on their chances in the election. Incumbent Gov. Rick Perry smashed the popular Democratic Houston Mayor Bill White, 65 to 33, while longtime Democratic Congressmen Chet Edwards, Ciro Rodriguez, and Solomon Ortiz also went down to defeat.

In California, it was Republican Gov. Arnold Schwarzenegger who was the hate object, and the beneficiaries were Democratic gubernatorial candidate Jerry Brown, and Sen. Barbara Boxer, both of whom had been locked in very tight races during the campaign.

Leadership Needed

In the course of the Weekly Report discussion, LaRouche outlined precisely the kind of leadership required to move the nation out of the potential collapse into chaos, which is looming in this post-election period. Among those leaders, he noted, is LaRouche Democrat Kesha Rogers, the Democratic candidate for the 22nd District in Texas (Houston), who emerged as a significant national leader of the party in the course of the election campaign.

Rogers was given 32% in her race against incumbent Republican Pete Olson, but the numbers by no means tell the story. Reverberations of her courageous fight for removing Obama, saving the space program, and implementing the LaRouche plan are being felt internationally, and will continue to be so.

She will be joined, of course, by fellow LaRouche Democratic candidates Rachel Brown (Massachusetts) and Summer Shields (California), who also waged principled fights through the electoral campaign.

Between Now and January

In his comments during the LPAC Weekly Report, LaRouche gave the following summary of what must be done in the month ahead, while the Democrats still control the Congress:

"So therefore, we have a situation, in which the minority, which includes me and my friends, politically, both here and implicitly in Europe, and also in Asia—those who are implicitly my friends, in the sense that they have policies which concur with my intention; that is, the effect concurs with my intention, and goes in the same direction: high technology, improvement of food supplies, raising the standard of living, going to technologies, which raise man's power to exist, that sort of thing.

"Therefore, unless the policies which I would put in, and with people who think in a direction similar to what I'm doing, would put in—these policies are the only thing that would work. Otherwise, if somebody has a policy contrary to what I would endorse, now, they're finished! They're finished before they start, because they're going to take their nation down with them.

"So, the Republican Party is a joke. Not all the Republicans are jokes, but the Republican Party is a joke. The Democratic Party is not a joke: The Obama Democratic Party is a joke. But the Democratic Party is not a joke. What has happened, is the Democratic Party, which is more comfortable for the people, normally, at least under these conditions, could, free of Obama, function:

"We could, between now and January, the January transition, we could actually, launch a number of pro-

grams, through the Democratic Party, which would save the nation, and put the world on direction to save it from this crisis. That means that Bill Clinton and company would be playing a big role in that sort of thing, because he's a credible ex-President. All the other ex-Presidents, including Gore, who would be an ex-President, are failures! They can accomplish nothing: They're not competent. They don't have the ideas, they don't have the willingness to adopt the kind of ideas. Oh, you'll have some Republicans, for example, would be sympathetic to the space program, sympathetic to other things like that, which are good....

"So, you'll get a bipartisan policies which will be good, among Democrats and Republicans. That's possible, and that's what's desired. But the Democratic Party, really, in this period, between now and the next transition to the official swearing in of the new Congress, until that's done, there is a gap, in which the existing leadership in the Democratic Party—if it dumps Obama!—would then be freed to consider measures, which would be popular. And the very fact that you see this Texas/California irony, where Texas—the place, an absolute *disaster* for the Democratic Party in Texas! All kinds of good candidates were just *wiped out* along with the others in this thing. California? The most hated thing is the governor. He's killing more people than anybody else. He's really like, you know, his father's Hitler background is coming forth out there.

"So therefore, you'll find that, now the election has occurred, and people have pulled the chain, on the toilet—the result—that, there's an interim period, right now, in which it is possible, conceivable, and necessary, for the Democratic Party, with others, in the United States, to take a lead, in going first of all, with getting the President out: The saving of civilization, as a whole, today, immediately depends on getting Obama out. And that means, the 25th Amendment, 4th section. And that's necessary, it's there, the evidence is there, the guts and wisdom to do it is what's lacking. But I think that can change."

LaRouche's Plan Will Do It Today!

FDR's Measures Worked To Reverse the Great Depression

by Nancy Spannaus

Nov. 2—The fact that the United States, and the rest of the world, find themselves in an *unprecedented*, existential economic and social crisis, can not be allowed to blind us to the crucial reality that *the measures instituted by President Franklin Delano Roosevelt worked* to move us out of the 1930s Depression. While FDR's measures were not a strict model for today, they give us clear guidelines for what can and must be done *immediately*, as soon as that impediment, Barack Obama, is removed from office.

The immediate measures required today, as laid out by leading FDR advocate and foremost economist Lyndon LaRouche, are three. First, the exact restoration of FDR's imposition of Constitutional banking, through the Glass-Steagall Act. Second, the rescue of the bankrupt cities and states, whose cutbacks in essential services and employment are now leading to the virtual disintegration of the fabric of American society. Third, the launching of the North American Water and Power Alliance (NAWAPA), as the defining infrastructure project whose implementation, and spinoffs, will lead to the reindustrialization and revival of the U.S. economy (for a start).

In each of these areas, and, most importantly, from the standpoint of principle, FDR set a precedent for effective action. The banking case is clear-cut, and it was lawfully, the first thing on FDR's agenda, because no other measures were possible without restoring national control of currency. Soon thereafter, followed his Federal Emergency Relief Act (FERA), which began to

National Archives

FDR's emergency actions to get out of the Depression began to work immediately. Here, we see him at the first CCC camp, set up in Virginia's Shenandoah Valley, surrounded by some of the more than 300,000 young men who had already been enrolled in this emergency jobs and reforestation program within its first three months of operation.

pour hundreds of millions of dollars (today, that would be billions), into the localities, both for immediate sustenance, and for employing workers in the essential functions which the localities could no longer afford. FDR's infrastructure program, of which the Tennessee Valley Authority was the symbol, was based on harnessing water power for mass electrification, and management of water resources for the benefit of agriculture and industry.

Over the last few years, the public press and discourse have been dominated by attacks on FDR's New Deal, masquerading as "objective" reports on its failure. These lies have come from the likes of the Wall Street-apologist, author Amity Shlaes, and recently even from Barack Obama himself![1] The desperation of the British-centered financial interests who are directing this campaign of lies is understandable; they are doing their best to maintain their control over their bankrupt system. But why should any intelligent person otherwise believe this load of propaganda by the very same individuals and institutions who are claiming that we entered a "recovery" in June of 2009? True, a large portion of today's population didn't live through FDR's presidencies, but the evidence is as plain as the Hitler mustache on Obama's face.

As we enter this post-Obama era, let's review the facts.

The Intention: The General Welfare

Franklin Roosevelt's core conviction can be encapsulated very briefly: his commitment to restoring the nation to the principles of the Constitution, as stated in its Preamble. His second Inaugural Address on Jan. 20, 1937, expressed that commitment and intent most directly. After asserting that Americans would and should refuse to be governed by "blind economic forces"—the so-called "market forces" of today—the President came to the point:

"This year marks the 150th anniverary of the Constitutional Convention which made us a nation. At that convention our forefathers found the way out of the chaos which followed the Revolutionary War; they created a strong government with powers of united action sufficient then and now to solve problems utterly beyond individual or local solution. A century and a half ago they established the federal government in order to promote the general welfare and secure the blessings of liberty to the American people."

It was from this standpoint that FDR approached the emergency that he faced when he took office. As Governor of New York, he had expressed his commitment to the idea that government exists to protect and benefit its citizens, including by pioneering measures of public works, unemployment insurance, and public relief. In his first Inaugural, he specified two crucial points of implementation:

• Jobs: "Our greatest primary task is to put people to work. This is no unsolvable problem if we face it wisely and courageously. It can be accomplished in part by direct recruiting by the government itself, treating the task as we would treat the emergency of a war, but

1. On Oct. 28, in a discussion with "progressive bloggers," Obama said, "We didn't actually, I think, do what Franklin Delano Roosevelt did, which was basically wait for six months until the thing had gotten so bad, that it became an easier sell politically, because we thought that was irresponsible. We had to act quickly."

at the same time, through this employment, accomplishing greatly needed projects to stimulate and reorganize the use of our natural resources."

• Credit: "In our progress toward a resumption of work we require two safeguards against a return of the evils of the old order: there must be a strict supervision of all banking credits and investments, so that there will be an end to speculation with other people's money; and there must be provision for an adequate but sound currency."

Necessarily, FDR began with the restoration of sovereign credit—as we must do today.

Restoring Sovereign Credit

FDR reasserted U.S. government control over the currency and credit of the United States through two primary measures: The Emergency Banking Act and the Glass-Steagall Act. Both were enacted during the first 100 days of his Presidency.

The Emergency Banking Act was enacted on March 9, 1933, the first bill to be passed by the emergency Congressional session which FDR had called. The act followed FDR's imposition of the Bank Holiday, which closed all the banks in the United States (yes, even J.P. Morgan), and froze all banking activity, including the transfer of gold and silver out of the country, and conversion of currency to gold. FDR's legal authority came from the Trading with the Enemy Act, which permitted (or one could more rightly say, reasserted) Executive ability to control the flow of U.S. currency internationally.

What is less known than this dramatic action, is the fact that the Wall Street banking interests at the time, centered around the British-linked J.P. Morgan, in anticipation of what measures FDR might take, had begun what could only be called a massive "gold heist" out of the country. In the first days of March, hundreds of millions of dollars worth of gold had been shipped out of the United States, in a blatant effort to bring the new Administration under the heel of Wall Street.

But it didn't work. FDR not only froze the gold transfers (with potential penalties—stiff fines or jail time, if the law were violated), but he established strict Federal supervision over the banking system as a whole. Every bank in the nation had to be audited by the Federal government, before it could be certified to reopen. And ultimately, in several steps, FDR abandoned the (British-imposed) gold standard altogether, including the obligation to pay in gold which was written in public and private contracts, thus restoring government sovereignty over the currency. As author Arthur Schlesinger, Jr. wrote, FDR was making monetary policy "the instrument of consious national purpose," not the plaything of market.

The second measure to restore the soundness of the banking system for Constitutional purposes, was the Glass-Steagall Act itself, finally signed into law on June 16. Glass-Steagall reinforced FDR's determination to protect the nation against the speculators who had helped bring on the Depression, by establishing a strict separation between commercial and investment banking—as he indicated in his first Inaugural address—so that, as one contemporary account put it, banks could never again be "the chief tom-tom beaters for the speculative frenzy." Depositors' money could not be the fodder for speculation.

The addition of Federal depositors' insurance to the Glass-Steagall measure made that separation even stronger: no taxpayer backup for financial gamblers. Instead, the Federal government would back the issuance of credit to honest citizens.

Clearly, this is what we must do again today.

Aiding the States and Localities

In his inaugural address, FDR put a priority on the creation of employment, stressing that the Federal government itself had a responsibility to ensure that its people had the opportunity to work. From his experience as Governor of New York during the first three years of the Depression, he knew whereof he spoke.

In August 1931, FDR had delivered an address to the legislature, in which he declared that one of the state's primary duties was "caring for those of its citizens who find themselves the victims of such adverse circumstances as makes them unable to obtain even the necessities for mere existence without the aid of others." In fulfillment of this duty, he had pushed through a $20 million program called the Temporary Emergency Relief Administration (TERA), which allocated monies for the poor. The program, the first of its kind in the nation, was administered by social worker Harry Hopkins, who took responsibility for allocating the funds, which over the next six years provided aid to about 5 million people, 40% of all New Yorkers.

Where possible, the money was provided in conjunction with work. Both Hopkins and FDR had firm convictions that the unemployed did not want to be "on the dole," but to contribute to society with useful work.

Library of Congress

Harry Hopkins set the standard for non-bureaucratic emergency action for the poor, when FDR appointed him Federal Emergency Relief Administrator in the Spring of 1933. Hopkins went on to head a series of relief/jobs programs, which ultimately supported tens of millions of needy Americans, largely by giving them useful work.

Library of Congress

Secretary of Labor Frances Perkins was one of FDR's closest collaborators in crafting the programs of jobs and relief which he implemented within the first 100 days. Perkins had also worked with FDR on labor issues when he was Governor of New York State.

Thus, it was the TERA model, which FDR incorporated during March 1933, when he first proposed FERA, in the face of the tens of millions of unemployed throughout the United States, and the increasing bankruptcy of states and municipalities to employ or support them. Playing a leading role with him in pushing it through, was Labor Secretary Frances Perkins, who had worked on labor issues for FDR in New York, and was determined that immediate help be given to the poor, as much as possible, through creation of public works jobs.

Under President Herbert Hoover, the only monies available to the states for aid were loans—which the states could obviously not afford to contract. FERA took the only workable approach—outright grants.

The Act immediately allocated $500 million in grants, half to be distributed to states and localities, with the proviso that they add $3 to every $1 provided by the Federal government, and half to be issued by the Federal Relief Administrator with no matching requirement. Equally importantly, the administrator had the authority to set the rules for the spending of the funds.

Hopkins, as FERA administrator, never did stand on ceremony. In response to the overwhelming need, he spent his first $5 million in the first two hours after taking on the job. During its two-year lifespan (in 1935, it was replaced by the Works Progress Administration and Social Security Administration), FERA supported tens of millions of people, many of them in local service jobs which the localities could no longer afford to fund. School maintenance, sanitation, repair of public facilities and roads—these were just some of the functions which FERA funded, in the face of the bankruptcy of the states and localities.

In his book *Nothing to Fear*, author Adam Cohen estimates that at its height, in January 1935, FERA was helping 20 million Americans, or 16% of the U.S. population.

Even during its short life, FERA was clearly inadequate to the need, and was supplemented by two other programs, the Civilian Conservation Corps, and the Civil Works Administration. The CCC, which employed over 300,000 young men at its start, in the Summer of 1933, aided the localities by putting the unemployed to work, and providing a small stipend, much of which was sent home to families. The CWA, created to meet the emergency of the Winter of 1933-34, employed 4 million workers between Nov. 9, 1933 and late March 1934, when it was disbanded.

In effect, the CWA employed people for the functions which local governments could not afford. Its workers built or improved city streets, constructed or remodeled school buildings, created airfields, laid miles upon miles of sewer lines, and constructed or improved parks, playground, stadiums, and swimming pools. (Note that much of that infrastructure is still in use

today.) In addition, the CWA employed 50,000 teachers to keep rural schools open and teach adult education classes in the cities, and made it possible for unemployed teachers to return to the schools.

In the face of the ongoing shutdown of the most basic city services throughout the U.S. today, emergency measures just like these are immediately required.

Conditions of squalor, like this pictured in Washington, D.C. in 1940, were the target of FDR's program of aid to localities under the Emergency Relief Administration. Today, we're headed back in the same direction, unless LaRouche's emergency actions are rapidly put into effect.

A Platform for Progress

The third crucial area of FDR's New Deal involved the construction of environment-changing infrastructure. I am not talking here about bridges and parks, and the like, but of what could only be called "great projects," like the Grand Coulee Dam, the Hoover Dam, and the Tennessee Valley Authority, which itself includes 29 hydroelectric dams. These projects literally changed the landscape of the regions where they were built, in order to modernize industry and agriculture, and to create the basis for irrigation and power generation for a whole new level of economic development.

I will not devote much space to this aspect of FDR's New Deal here, because LaRouche and his Basement associates have dealt with it extensively elsewhere. But, it should be emphasized that the concept behind regional developments like the TVA and the Hoover Dam, was at the top of FDR's agenda (Note the TVA being put through in May 1933), and was oriented to making a *national* change. These projects employed tens of thousands, but that was not the reason for their initiation. They were drivers for lifting up the entire economic process.

Two elements make the case. First, is the process of rural electrification, which was put on a fast track with the creation of the huge dam projects. Thought about properly, the creation of these huge networks of electricity distribution created a *platform* for industrialization and modern agriculture that lifted the potential productivity of the nation as a whole. While one could not argue that FDR had the same conception of infrastructure, as a platform of development, that LaRouche has, he was clearly thinking and acting in a manner coherent with it.

The second telling point is that it was in these areas of massive dam (and electricity) construction, specifically Grand Coulee and the Tennessee Valley, that the nation's most advanced production facilities for World War II were located, including the Oak Ridge nuclear research facility.

LaRouche's NAWAPA program, conceived as a planetary biospheric engineering project "from the top down," clearly dwarfs FDR's conception, as well as his projects per se. The TVA and Hoover Dam projects, for example, like NAWAPA, were *national* projects, involving input and industrial buildup from all over the nation; NAWAPA is not only national, but international. Yet, the TVA continues to act as an inspiration to those engineering layers and others who are now working with LaRouchePAC on the NAWAPA design—as a true stepping stone to the future.

Unifying both projects, of course, is the conception of man's creative role in the universe—a conception LaRouche has taken to new scientific dimensions. It is this precious idea which our American institutions were created to defend.

Time is running out for us to take the "action, and action now" required to save our nation. It is our duty to take courageous action, as FDR did, and much more, before it is too late.

LPAC TALKS WITH INFRASTRUCTURE EXPERTS

NAWAPA: Toward a New Economic Platform

The following is an edited transcript of a conference call hosted by the LaRouche Political Action Committee (LPAC) on Oct. 23, 2010, with specialists in different fields from around the country, on the topic of implementing the North American Water and Power Alliance (NAWAPA). This was one of a series of ongoing such conferences.

*The specialist participants were **Terry Bates**, project manager, heavy industry construction; **Howard Chang**, professor emeritus of civil and environmental engineering at San Diego State University, president of Chang Consultants; **Hal Cooper**, railroad engineer, Cooper Consulting Company; **Dewitt Moss**, chemical and nuclear engineer, project manager for BWR and Liquid Metal Fast Breeder Reactor fuels and materials, U.S. Department of Energy (DOE) senior site representative at EBR-II, Argonne National Labs-Idaho; **Don Riley**, nuclear engineer (ret.), DOE branch chief for Fast Flux Test Facility core design, DOE chief engineer Clinch River Breeder Reactor Plant. The LPAC moderators were **Michael Kirsch**, **Oyang Teng**, **Cody Jones**, and **Dave Christie**.*

Last week's EIR *presented synopses of the videos posted at www.larouchepac.com on the expanded NAWAPA project. The reader is urged to consult these and the larouchepac website, to grasp the full scope of what is being proposed here.*

Michael Kirsch: Good afternoon, and welcome to the NAWAPA call, which we've been having for a number of weeks, as we've launched a push for a new recovery program for the United States, and which has implications for the world. We have just this week posted a new video on our website, called "Taming the Darien Gap," which really completes the connectivity of all Eurasia, Africa, and the North American landmass, in one whole process of guided development, and connected development, and coordinated development, of water projects, uplifting the different regions of South America, water projects throughout Africa, projects for the deserts of Eurasia and Asia, as well as our own desert here, in the United States.

The context in which we're discussing a complete upshift in management of our whole Biosphere, and a return to a real science-driver program that we had during the time of the Tennessee Valley Authority (TVA)—the effects seen in Oak Ridge, the space program, which would necessitate the kind of control room sense of it, as Charles Wojcik talked about on the interview video we had featured on our website [http://www.larouchepac.com/node/16114]—is that we are here, with, unfortunately, a Congress, which, although it has a Constitution to accomplish such a task as this, and history embedded in a nation, a sovereign nation, which could lead other sovereign nations in coordination to

This prototype model of an integral fast reactor is a technology that, in the broader NAWAPA context, could be part of a huge economic upshift. It was under construction at the Argonne National Lab West in Idaho, but was shut down in 1994, three years prior to completion. The IFR is a closed cycle: It uses existing waste for fuel, and no long-lasting waste is produced. The fuel is irradiated, melted, reprocessed, and put right back in again.

accomplish this project, we unfortunately have a Congress and a leadership which is currently gripped by a set of axioms of monetarism, and other axioms about economics and science, which are pushing us now; where we've elected a President, who needs to be put through the gauntlet of the 25th Amendment, and taken out of office, for complete incapacity to lead.

And we have been putting on our website in the last couple weeks, that we are now at a last chance, where Obama has to go, because he's standing in the way of initiation of an emergency, Franklin Roosevelt-style 1933 bankruptcy reorganization. And the organizing principle for that would be a return of Glass-Steagall, a repeal of the repeal of Glass-Steagall. And unless Obama is removed, that bill cannot be passed; it will not be passed under his watch. But without its passing, we are actually facing now a global hyperinflation, which has been picking up speed over the last few weeks, and Fed chairman Ben Bernanke has now signed through a second round of what he's now calling "quantitative easing," which is, unlike Germany's 1923 hyperinflation in Weimar, not enclosed within the borders of Germany: It is a global inflation, which nations around the world are all partaking in, to continue this current paradigm of restricting human development, to monetarism.

So, as this system is ending, that's the context in which we, here, are discussing what the alternative would be, a general upshift of humanity's development of the Biosphere, improvement of the Biosphere, and our own economies. And if we can paint both the necessity and possibility of this, it will aid in that political agenda, but if we also achieve in that political agenda, accomplishing this change in our policy governing the United States, we will have something in place—people ready to run into the White House, and say, "Here's the program!"

And so, that's the context that we're facing here, today, with this current discussion. And, the format of today's call, is that I'm going to have one of my associates, Oyang Teng, introduce the theme of today's discussion. And we have a few featured guests, a hydrologist from California, as well as a couple of leading nuclear experts, and we want to invite everybody on the call today, to participate, after, and during, discussing the general theme. . . .

Biospheric Development

Oyang Teng: Hi, I'll keep this brief. I just want to point out, that in the course of elaborating the NAWAPA project—and when we discuss NAWAPA, we really mean the North American Water and Power Alliance and the implied global developments, through the Bering Strait, into South America, some of the things that Michael alluded to, all of which we have, or much of which we have video material on. That, in the course

of elaborating the project, there are a number of different features, one of which has been described by Mr. LaRouche as, in effect, a university. And I think the representation on today's call, gives some sense of that: We've got rail engineers, nuclear engineers, civil engineers and hydrologists, I think we have an architect, people involved in forest management. So that already gives a sense that the scope of what we're dealing with here, and is going to require a kind of deliberation and a dialogue across different disciplines.

One of the areas that we want to define as, effectively, a new science, is something that we're terming "biospheric development." And it's a term that we use in the same sense of Biosphere as it was defined by biogeochemist Vladimir Vernadsky. There's an interesting political environment, today, in which the term "geoengineering" has become somewhat of a fad. Unfortunately, that's largely discussed within the terms of the global warming hoax: the idea that somehow, the only effect that human beings can or have had on the environment, is negative, and therefore, any large-scale schemes for intervening into the Biosphere, will be effectively emergency schemes, to either reduce carbon dioxide emission or reduce the amount of sunlight hitting the Earth, or other things like that.

"The water supply system for Southern California is one of the seven wonders of the modern world," said Dr. Howard Chang. Shown here, the irrigated land of the fertile Imperial Valley.

Clearly, what we're talking about is the inverse, the complete opposite of that. That we're in an era, where the responsibility for mankind as a whole is to increasingly direct, and improve, biospheric processes on a large scale, and that involves the development of integrated infrastructure systems, of rail, high-speed rail, maglev rail, nuclear power; moving on to fusion power; water management, large-scale reforestation, irrigation, and so forth, where the different cycles, biogenic cycles, increasingly come under our control and our management. And the issue here, is not ever sitting on any one technological platform, or sitting on any one set of technologies, but continually pushing forward. And that's the real distinction that we want to make clear in what we present, as far as how we're going to carry out this project.

So, with that said by way of preface, I'd like to make a start, with newer participants, if Dr. Chang is willing to share some of his thoughts, in terms of his expertise in the area of water projects, and large-scale civil engineering works in this regard, and particularly what the considerations are that he sees, in terms of bringing the hydrological cycles of the planet, including in areas like the desert Southwest, under our control and management. And then we'll see if people have questions, and move on from there.

An Enormous Undertaking

Howard Chang: Sure. Well, I happen to be familiar with water diversion projects in China, which I also participated in to a certain extent.

See, the rainfall distribution in California: We have a lot more rainfall in the north, much less in the south; for the North American continent, we have a lot more rainfall in the northwestern part, such as Alaska, Alberta, Yukon Territory, and so forth, but there's a scarcity of water supply in the Southwest, such as Nevada, California, Arizona, and also Mexico. And there is actually a water diversion project, a very extensive water diversion project, in Southern California.

In fact, the water supply system for Southern California is one of the seven wonders of the modern world. Think about this: Seven counties in Southern California, with a population of 20 million—90% of the water we use in this area is actually imported from two primary sources: from Northern California and from the Colorado River. The Colorado River water is shared between California and Arizona. Arizona takes a good share of the Colorado River water, what's called the Central Arizona Project. Of course, Colorado River

water is also shared by Mexico; they also have extensive irrigation systems.

You know, a lot of development is connected to the water distribution and the water supply. Right now, development in California is very much limited in the arid Southwest, by the supply of water. Water has become very expensive.

Now, water diversion is feasible, but let's keep in mind, this is going to be a gigantic project. We are talking about the distance, for water diversion; we are talking about construction of infrastructure associated with water diversion, where it will consist of canals, pipes, tunnels, pumping stations, storage reservoirs. Not only water diversion, but water storage and water distribution involve very extensive construction of infrastructure for water projects.

NASA

The All-American Canal in Southern California is the largest irrigation canal in the world. It brings water westward from the Colorado River to irrigate the Imperial Valley and supply water to nine cities. The dark line is the canal, which is crossed in this image by Interstate 8.

Well, it's got to be a long-term project. There's got to be a master plan to be made. In fact, I can see something like this. It's going to be good for the economy of America. Economic development right now is closely related to infrastructure construction. During the [Franklin] Roosevelt era, you see, the economy was revitalized, recovered, partly because of infrastructure construction. I'm not an economist, so I don't know so much about that. But I believe that water projects are feasible. What I have to say is, this is going to be a very expensive, long-term, and a gigantic project.

Let me spend a couple minutes talking about a water diversion project in China. You see, there's a lot more rainfall in the southern part of China, much less rainfall in the North. In fact, the city of Beijing is on the edge of a huge desert, the Gobi Desert. They are building—the project is actually going on—they're diverting water from the Yangtze River to the north, by three different routes: the eastern route, the middle route, and the western route.

Well, the eastern and the middle routes are already under construction, but involve a huge investment, something like $120 billion. It involves resettlement of a lot of people, something like 600,000. Of course, the resettlement of people would not be a concern for the United States; it would be a concern for a very densely populated country such as China.

The western route's water diversion has not been started, because that involves very, very expensive construction. Now, they want to solve their water supply problem by redistributing the water. That involves almost 50% of the whole country.

Now, if we divert water from say the area from Canada, from the Yukon territory, from Alberta, from Manitoba, and so forth, to the south, that project is definitely feasible. Of course it involves gigantic infrastructure construction, and also long-term investment. That's how much I have to say. That's going to be very good for the long-term economic development of America.

Large-Scale Irrigation

Teng: Yes, thanks for that. I do have one question related to irrigation: Let's take the Southwest United States. In particular, what kinds of considerations have to be brought to bear as far as large-scale irrigation goes, with respect to runoff, and maintaining the quality of the soil? And you have arid regions versus say, marginal lands that have some moisture, but maybe need a little bit of help. What are the relative trade-offs and benefits of irrigating marginal lands, versus very

arid lands, like in the desert?

Chang: Well, we have a lot of fertile land in the Southwest. If you look at the map of Arizona, large chunks of land are fertile, and it's not developed for agriculture.

I'll give you one example: Imperial County, California. Imperial County was a desert, a wasteland; but after they completed the All-American Canal, they turned that desert wasteland into the natural hotbed of the U.S.A. Imperial County can feed the population of California, only because of irrigation. Because of the use of the water from the Colorado River, to irrigate the land, for very large-scale farming.

You can find such lands, fertile land, large pieces, in Arizona, New Mexico, and Nevada, which are not cultivated, which are not being used, because of lack of water. And also in Northern Mexico.

Of course, there are many other concerns, environmental concerns, ecological concerns. All these issues would have to be studied, to be addressed, and the problems would have to be solved. It's a big challenge. This project is going to involve a lot of challenges, a lot of expertise.

Cody Jones: Do you know where we can obtain some of the specifics on where this quality soil is?

Chang: Have you heard about the Agriculture Research Service? By now, the name has been changes into NRCS, Natural Resource Conservation Service. It's part of the U.S. Department of Agriculture. They publish a soil report. They have extensive soil reports for the United States. What soil is good for cultivation, or not, can be determined from the soil report. Their study is quite extensive.

They cover much of the United States.

Jones: Okay, good. We've seen some of the satellite imaging also, that they've put together, and they do this soil-quality index. I guess that they put that together for determining where they can use a certain type of satellites. The parameters that they defined for soil quality were things like the amount of clay in it, certain mineralizing of the soils.

See, one thing we're trying to do is determine how useful the maps that they put out were for determining agricultural use as well.

Chang: I think this kind of information is quite available, with remote sensing, with the mapping by the Department of Agriculture, Agriculture Research Service. Counties and cities all have this kind of information. And I believe large pieces of land will be good for agriculture, but they are not developed because of the lack of water.

Teng: Okay, let me ask if anyone else has questions or comments in this general area.

Hal Cooper: Oh, I think Dr. Chang is exactly right in what he's saying, and that there's certainly a great deal of potential. You know, I proposed the extension of the NAWAPA project to California, because it really doesn't include very much of California right now. It's already in Arizona, but there needs to be more, certainly, in California, as a work-creation mechanism, as well as a way to solve our problems of water, as well as the economy.

The Arid Southwest

Dewitt Moss: Though I'm in kind of a temporary residence down here in Palm Springs [Calif.] now for a few months, I'm aware of the fact that the Colorado River is totally over-allocated. And there's been a Federal judge who has said that Southern California's usage of the Colorado River has to drop back now, to accommodate Arizona's increased usage; and that usage must go from somewhere in the 5.4-5.5 million acre feet range, within a few years, to, I believe, 4.4 million. So that's a reduction of 25% in one of the most highly dense populated areas, and that is not necessarily all associated with agriculture, although the Imperial Irrigation District that was mentioned by Dr. Chang is probably responsible for somewhere in the order of, I believe, 80-90% of that water. They feed the Western half of the United States, and they have somewhere between 500,000 and 600,000 acres of land under cultivation, that basically grows crops 24/7, 365 days of the year.

So, Southern California has a real need to, in fact, promote this, because whatever water shortage there is, Arizona and California, are going to have to cut back to meet the treaty commitments that we have with Mexico.

There is just, I think, a terrible shortage of water in the arid Southwest, and by the time you take Arizona, California, and then the treaty requirements that we have with Mexico, there's a need for something. And the Colorado River can't provide it.

Cooper: Michael, exactly what he's saying is correct, and that's why I put together that plan for California, because the NAWAPA plan was not really including that much of it. I totally agree with that.

Moss: And as someone that's kind of fought these

water battles for quite a few years, I like it. But Nancy Pelosi seems to be quite enthused about stopping the Western Irrigation District from irrigating about 500,000 acres there, because of the delta smelt [an endangered species of fish—ed.].

That will not go away.

Cooper: Yeah, Nancy Pelosi has been a real enemy of keeping water in the San Joaquin Valley for farming. And it's funny, that's never been really pointed out very much, but it should have been.

Terry Bates: Just a little more on what Dewitt had to say from the Palm Springs area, and substantiating Dr. Chang's thesis. Dewitt could probably address it better than I could, but I've been through Northern Mexico, at the border there, I believe it's Mexicali and Calexico, and that is a terrific example of what can happen when water gets into an arid area.

Chang: Many more acres can be put into production, if there's more water available. Right now, the Colorado River entering Mexico has become a trickle. I have visited the entire irrigation system in Northern Mexico, and also Imperial County, as well as the water supply systems of Southern California.

There's one organization, called the Metropolitan Water District, that supplies water to 20 million people in Southern California, seven counties. And 90% of the water they supply is imported.

Effect on Climate

Teng: We've got another question here for you, Dr. Chang, and then we'll see if there are any others. Then we'd like to move to the question of nuclear. Here's Cody.

Jones: Yes, Dr. Chang, I was also wondering: In many of these big water projects that you've been involved in, in China, or in the research you've done in the United States, has any work been done on looking at some of the climate effects, the changing climate, temperature, also things like weather systems, how these would affect the rain cycles, or any other elements of the weather cycles? Is there any research that's been done on that, or any studies you know of?

Chang: Well, there was a big study that took place in the Soviet Union, when they diverted water from Siberia to Central Asia, through Kazakstan, and also Uzbekistan.

They were concerned that that would have a climatic effect. That's one area—that's not my expertise.

You know that involves a global study, how the redistribution of water would affect the climatic pattern. On the other hand, whatever we do, in comparison to the Earth, is really a very tiny part. My feeling is, if there's any impact, that impact would be quite small, because the Earth is so great. The hydrosphere is not very much affected by human activities. Human activities would have limited impact.

The only study I'm aware of is that study in the Soviet Union, that took place maybe 40 or 50 years ago.

Teng: Great, we'll try to track that down.

Chang: That would be interesting. They took so much water from Siberia, for irrigation, they drained much less water into the Aral Sea, or something.

Cooper: The Aral Sea, yes.

Chang: That sea has shrunk, by something like 60%, because there's less inflow of water into that lake.

Teng: Right. We actually have a video on that area, specifically. [http://www.larouchepac.com/nawapa-aral]

Chang: That's a very big lake, an inland lake.

Cooper: The water never really was diverted from the northern rivers, from the Ob and the Yenisei rivers. It shows you how *not* to do it.

Chang: Right. That's because they used the water on land, thereby reducing the water inflow into the lake. That's what happened to the lake. But the diversion from Siberia never took place?

Cooper: No, it really didn't. And it was not properly done. If it had been properly done, those bad effects would never have occurred.

By the way, on the climate issue, in Eastern Washington, with the development of the Columbia Basin project, since the 1930s, I can personally tell you that you don't see the extreme high temperatures in the Summers that you saw before it was built, according to people who live there.

Chang: So, it does have local impact on the weather.

Cooper: And, it has increased the rainfall over there in central Washington too. That would just be an example.

Chang: I see.

Cooper: You guys would have to check out the climate data, but it's available, and I think you'd find out that there's been a significant change, in terms of lower extreme temperatures and higher rainfall in that region.

Teng: Yes, there are a number of interesting case studies that are worth looking at. What you just mentioned, Hal, the Central Valley, what John Sparland described in Oklahoma [on an LPAC interview with engineers], and certain other areas which we're in the process of looking at.

©Carlsbad Desalination Project

The site of the Carlsbad Desalination Project, now under construction in San Diego County, Calif. Power is supplied by conventional sources of electricity. The plant is scheduled to be operational by 2012.

Global Impact

Kirsch: I have another question for Dr. Chang. From what you've seen—you've seen northern Mexico, you know the situation in the U.S. rather well—just showing, once again, what we could do with this immediately, how would all these areas of the NAWAPA system overlap the current local systems, that have all their own problems? What is your sense of that, of what would that make possible?

Chang: Well, it takes a lot of construction. It takes a lot of energy, for water transfer, that's for sure. And it's going to take a long time. Long-term planning. But definitely it's going to improve the productivity of the arid areas tremendously, that's for sure. It could be a long-term goal. It's going to be a very ambitious project, let's face it. Because the distance to travel is very long. The quantity of water to be imported is large. And it's going to take a lot of energy, that's for sure.

Teng: Just one thing, that we've discussed with a few people, as maybe a thought-experiment. It might be something that you guys in Arizona, or people who have been down there, might have a more visceral sense of, but there is an interesting question: If we had large-scale irrigation in the Southwest, and in Northern Mexico, that could have an effect on what's called the North American monsoon. Either by adding moisture, or reducing the amount of heating of the land. And I throw that out there, maybe just as a provocation for people to think about.

Let me pause and see if there are more questions.

Nuclear Desalination

Dave Christie: I'm a LaRouchePAC organizer in Seattle. I do have a question, because it comes up often in my work, organizing some of the people in the nuclear field. Immediately, when I bring up NAWAPA, and where a lot of the water use goes, the question is posed, "Well, why don't we just do nuclear-powered desalination facilities?"

And once you get into the questions of energy spent in desal, and then, of course, the pumping systems to get it to where a lot of this water goes, people see that it's not really worth it, whereas, as one person put it, "NAWAPA is essentially building a new river." And once the river is built, you've got a continuous supply of water, virtually free, in that sense. So, people maybe see that, where a lot of the water goes.

However, the use of nuclear-powered desal for the coastal cities, San Francisco, Los Angeles, San Diego, and then, potentially, for areas immediately around there, for irrigation: We haven't discussed that much. It comes up periodically in my organizing.

Chang: Yes, I happen to know something about desalination. A big project for desalination has just been approved by the Coastal Commission, in San Diego County. That project has not been built, but there has been a cost analysis. The water produced by the desalination project will cost twice as much as the water we currently use, from the Colorado River, that's one thing. The San Diego County water authorities are consider-

ing purchasing that desalination plant, but they do have that cost analysis consideration in mind: That water's going to cost twice as much per acre-foot, as the water we currently get from the Colorado River.

Because desalination, first of all, if you want to get a permit, that's a long process! It's going to go through all kinds of scrutiny; and it's going to be energy-intensive.

The company that developed that desalination plant in San Diego County is called Poseidon. They probably have more information about that. I know it has been approved. It's a huge project!

Teng: Good, that's good to know.

A New Platform for Nuclear Power

I know that we have a couple of newer folks on the call, including Don Riley, who's a longtime nuclear expert, and I'd like to invite Don to comment on his thoughts, in terms of NAWAPA, as bringing about a new platform for nuclear power, which, as we probably all know, we should have done 30 or 40 years ago. And including, if you have thoughts particularly on this question of desalination.

Don Riley: I haven't done any research on this particular subject, but it appeared to me that there was a lot of potential nuclear power in here. But, you'd want to look at the details and see what the advantages might be, versus the cost and schedule.

One of the big things that's been mentioned occasionally in the discussion so far, especially for that San Diego desalination, is how long it would take to get it approved. I think that is, by far, one of the biggest problems we're confronted with: that the government has become so involved in detailed requirements that are almost impossible to meet, and to meet them takes years of background work.

So, I don't have any significant contribution, except to say that it looked to me like what you were talking about had the potential for making effective use of nuclear power.

Kirsch: I did have a question for you on nuclear power and its relation with NAWAPA. Here it is, 2010, and for this program we're talking about, obviously, we need a revamping and gearing up of our technological capacity in the United States, and we've lost the sense of investment in infrastructure as something which is going to transform the whole economy. There are still innovations being made here and there in the economy, of new technologies and things like that. But what we're talking about here is, we need to apply the new discoveries that have occurred in the last 50 years, to the entire economy.

And NAWAPA is obviously a grand-scale management system. One thing that we need to do, before we come up with the final design for this program, for today, versus 1964 [when the program was designed by the Ralph M. Parsons Co.—ed.], is to get someone like yourself and the people who have a very good sense of what is the baseline technology that we want to bring to the table, to apply to this design. And so, my question to you is, what would go into considering such a baseline technology? Would nuclear power be a consideration in it? If we want to sit down at the table and say, "Here are the new technologies that can be applied to NAWAPA, and here's what we include in the package"? Is that clear?

Riley: Well, I think that your thoughts are very fine. It turns out, at the present time, that the government is opposed to anything that even sounds like nuclear power. I myself was challenged by the head of DOE, because I had advanced reactor experience. So, basically, they're trying to destroy anything that exists in that area.

It also turns out, that our only future, in terms of significant power, lies in nuclear power, and the integral fast reactor, which, in 1994, was destroyed by the government.

So, right at this point in time, there's nothing being mentioned about nuclear power. You can look at the Oak Ridge National Lab's brief study of energy in the U.S.—it doesn't mention nuclear power! So, basically, there's a big hurdle that we have to get over, that exists in the government, that is anti- any advanced concepts that might be productive and useful for the U.S. in the future.

Kirsch: Well, if we assume here, here that we both can make the case for the needed removal of Obama, and overhaul of the financial system; and also, assuming that there was a changed political environment, in which we would be moving, as FDR did, in bringing all of our capacities to the table, let's say that all of these hurdles are out of the way, those which you're referencing, which are obviously there. Now, would you have some thoughts on what would be the new technologies that we could use, if we had the capability to apply them?

Riley: I think the most potential technology is the

integral fast reactor, and the pyro-processing [high-temperature reprocessing of nuclear fuel—ed]. Basically, that would supply us with over 1,000 years of total fuel requirements that we might have. But that's being put under cover by the present government.

Teng: Yes, let me open it up and see if people have comments. I think that what Dave raised, the issue of desalination, does open up an important point. Going to a higher technological platform, especially when it's integrated, when you're taking transportation, when you're taking water management, when you're taking power generation, and you're developing them as an integrated system, now you're at a level where you have more than the sum of the parts. You take any one technology, like nuclear fission, and you can have desalination. If you have these fast reactors, you can close the fuel cycle, you can reprocess fuel, you can create new isotopes, so we wouldn't have to import medical isotopes, and things like that.

And it does get you to a higher level, where the point of technological development, is to continually move off of what you're using now. And so, we'll eventually go to fusion and other things.

Bates: I have a comment and a couple questions. It would be interesting to do an energy balance between desalination and BTUs per pound; it's about 980 BTUs per pound to evaporate water at 1 atmosphere, and that requires a horrendous amount of energy. Number two, what are the current costs, per kilowatt, or megawatt, of a nuclear plant? Number three, it seems to me to be advantageous to have an array of nuclear plants along the entire system, generating electricity for the pumps. And I would like your comments on using the river itself for cooling. It also seems to me that there's some advantage in using slightly warmer water for the propagation of crops.

Teng: That's an interesting point you raised. Other people before have raised the issue of having the modular reactors along the route, which seems to make sense.

On the warmer water, advantages for agriculture, I'd certainly like to know more about that. Does anyone else have any comments?

Moss: In southern Idaho, down the Bruneau River, there's a lot of hot water, and a lot of this hot water is pumped out and put to irrigation of crops. It serves two things: one, it keeps the frost away, and it grows the crops quicker. So, there really is not much of a detrimental effect, as long as you are not talking about scalding water.

The Cost of Nuclear

Let me just backtrack a little bit: I just read an article, I think in one of the technical magazines, which outlined the costs of various power productions, and I'm sure that these are all based on large, commercial-scale power production. Nuclear was listed as 8-10 cents/kilowatt hour (kWh) compared to coal, which was about 6, as I recall, and compared also to natural gas, which was in that range.

But that was before this large influx of natural gas that became available because of the fractionation process, clear throughout the Appalachians, and Northeast, and now in the South and Southwest. What was, a few years ago, thought to be a 20-year supply of natural gas, has now become almost an 80-year supply! So, all of a sudden, natural gas looks much better than coal, because of the carbon imprint, and so it is going to kind of be the yardstick, as I view it, that nuclear power is going to have to be associated with.

And for nuclear, the cost really comes from the processing, the licensing, that Dr. Chang mentioned, and it's time-consuming, it's expensive. You have to design for a maximum, credible accident, and then you have to build in safety features that no other plant, or no other industrial process, has to consider. This is why nuclear power plant pricing probably will not come down significantly; it is an energy source that may last a thousand years. We could make it longer, if we went to a breeder.

So, there is tremendous potential, but it's going to have a penalty.

Riley: I think you'll find out, if you really look at the details, that the cost of nuclear power would be equivalent to the cost of coal power. You can add to that, there is presently 700 years of nuclear fuel available for fast reactors, just sitting there, waiting to be destroyed by the Department of Energy.

So, basically, the cost, once you started building some plants, would be equivalent to coal-fired plants. And in addition to that, you've got over 700 years of nuclear fuel available for fast reactors, that's just sitting there, free, the result of World War II enrichment process.

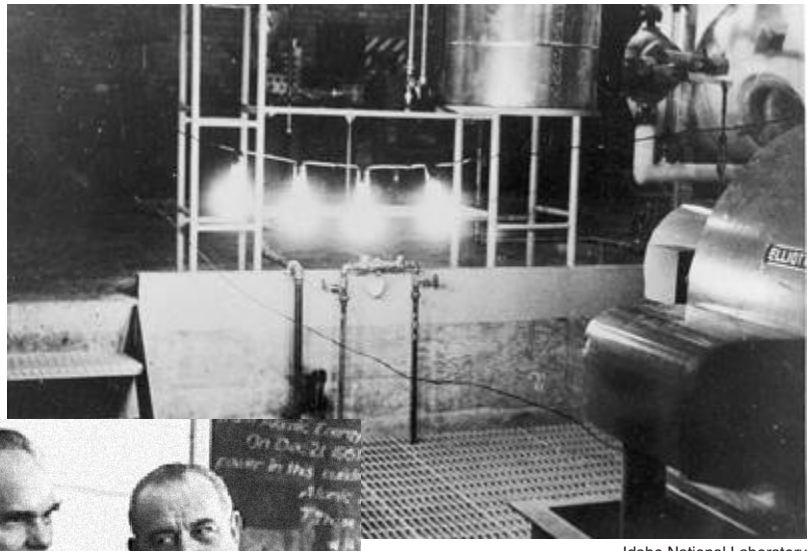
Teng: A quick question for Dewitt: You said that

some of this nuclear river-cooled water was already happening. which river was that?

Moss: I'm talking about geothermal warm water, that's applied to crops in southern Idaho.

Teng: Oh, okay.

Moss: It's deep-ground pumping out of a geothermal resource.



Idaho National Laboratory

The first U.S. Experimental Breeder Reactor (EBRD 1), near Arco, Idaho, became the world's first electricity-generating nuclear power plant, in 1951. It was deactivated in 1964 and declared a National Historic Landmark by President Johnson (shown here, with Atomic Energy Commission chairman Glenn Seaborg) in 1966.

Fast Breeder Reactors

Teng: Okay, interesting. I also have a quick follow-up: Is there a difference between what Don referred to as an integrated fast reactor [IFR] and a breeder reactor?

Moss: They can be one and the same, but the integral fast reactor is in a closed cycle, in which you irradiate the fuel, take it out, pyrophorically melt it, reprocess it, and put it right back in. It never sees daylight; it just goes from the processing unit, right back into the reactor. And it could be a breeder fuel, if you wanted it.

Does that agree with you, Don?

Riley: Full agreement with what was mentioned.

Moss: This is a comment: The integral fast reactor concept has really been demonstrated, some with plutonium, the majority with uranium. And the EBR2, the Experimental Breeder Reactor—we operated that reactor for about 20 or 25 years, in which we reprocessed that fuel, and it simply went right back into the reactor, and never became available for terrorists or any other concept that people have objected to. It simply is an integrated loop cycle.

Riley: The fast reactor has been shown—the EBR2, and the C4 reactor that was built specifically for that—to shut down by itself, without any special devices or operator control, just automatically. EBR2 demonstrated that and C4 demonstrates that.

So, there's no problem in terms of safety, or potential [for a disaster], like Chernobyl. In fact, if Chernobyl had been a fast reactor, it wouldn't have destroyed itself!

Another factor: The fast reactor IFR program is proliferation-resistant, so there's no potential in that, I think, for using any plutonium for bomb materials. When the [Clinton] Administration shut down the IFR program in 1994, they were so ignorant, they didn't understand that there wasn't any proliferation potential, in that program.

Overhaul the NRC

Teng: Is there anyone who hasn't yet had a chance to speak who wants to say anything?

Bates: This is Terry Bates, again. It seems obvious from the several nuclear experts that have been talking, that a gross overhaul of the Nuclear Regulatory Commission and their review procedures is necessary. This is consistent with your opening statements, insofar as the way our current government is functioning. From a nuclear construction point of view, and heavy construction, heavy industrial construction is my forte: Any time you're making a pick, you have to have a testing laboratory on site, to test the choker, to be sure it will withstand picking up a water cooler, to put in the operating room of the reactor. That's absurd! The costs become astronomical! And hence, my statement that a gross overhaul of the NRC rules and regulations, and permitting procedure, needs to occur. It will not occur under this Administration, and it may have to be by Presidential fiat, as a directive, to just

Argonne National Laboratory West

The Experimental Breeder Reactor 2 (EBR 2) went operational in 1965 and ran for 30 years.

"make it happen," and "I am suspending this and that requirement."

Teng: Well, the good thing, as I've told a couple of people, is that on the political side of things, that's what we do best, in changing the climate there. What we've got going here is a good start, towards being able to hit the ground running, as we make breakthroughs on the political side. And it's clear that there's a serious breakdown, not just economically, but also mentally in the White House, which is contributing to that climate.

Prospects for Future Work

This has been very useful today. We're continuing, I should say, to pull together the picture on some of these more speculative questions about the role of changing climate, managing different aspects of weather systems and so forth. One thing that comes to mind is, there have often been cases in science, where very weak forces apparently were ignored for a long time, because it didn't seem that they were significant—things, for example, having to do with the role of magnetism or electromagnetic effects in the body, in physiology, and only later was it realized, that they actually have a significant effect. And I think, actually going forward, as a science-driver on something like NAWAPA, will show us that there are a lot of surprises in store for us, once we begin to actually experiment and actually build these large-scale projects and intervene in a way that we haven't yet.

I think that's an exciting prospect, as far as essentially creating a new science, and interfacing that, with questions that come up with space colonization and space exploration, and realizing that the gaps between those kinds of frontier exploration questions, of keeping human beings alive in space, apply similarly to developing our knowledge for creating those kinds of infrastructural systems on Earth.

Secondly, I'll say to people on this call, it would be useful to also sort of stretch your imagination, and think about how your various levels of expertise could be brought to bear on questions that we haven't yet taken up in too much depth, but we've raised before: For example, the issue of city-building, and the organization of new urban/industrial/agricultural centers, where we're going to be able to integrate the availability of water and power, and mass transportation in a new way. And that's something we still would like to present, from our end, here.

Let me turn it over to Michael. I think he has a couple of things.

Kirsch: Yes, that our political movement, and what you can see on our website, has the characteristic that we're not waiting for the gods to descend upon the scientific community and the people who know how to build things, and say, either "Here's your funding," or "Here's your right of way." But our outlook, and what we're building, and what I posted on our website last week—the discussion amongst seven different engineers in the United States—has the direction to it, that the layers that are on this call today, amongst the population of the United States as a whole, really have to have a shift in identity.

And rather than being just people who have a background and are skilled in the technology of the United

States, really have to see themselves now, as the defenders of that technology and of that scientific capability we have as a nation. Because it's really only the people who can conceptualize the kind of economic program that we're talking about, that are going to be able to make it a reality. Because—well, let's just say this: The benefits of the NAWAPA system, if we look at it, in everything it would accomplish, that's very clear. It's been shown. But we're not going to sit back and say, "Well, we've made the case, and we hope people will decide to go with it."

The idea here, is to continue to have these discussions, and also I'm inviting everybody here to participate even more actively in opening up different discussions amongst many different people, and really pulling together a coordinated discussion amongst, you could say, a new "Brain Trust," like FDR had; a real think tank, the brain of the nation, to continue to make the case, for the people who can't see and who have mental blocks about why we need to do this.

And so, if there's more and more to clarify, and more and more to show what a benefit this would be, and to provoke the imagination, of what this could mean—just as the space program was for technology, what NAWAPA would be to the study of natural resources and development of them—to really provoke more and more of that kind of imaginative inspiration amongst the United States layers.

That's what we have to do, and I invited everybody here on the call, to participate in that process, and join us in making more videos for our website, which we're doing, and also broadening this discussion. And if anybody has any thoughts on that, or immediately, referrals, and things that you think we should keep our eye out for, or things that you can help us out with, please comment. Or any questions from today, or on what I just said?

Closing Remarks

Moss: Can I comment on a couple issues that we talked about today? One of the phenomena in the West, we talked about additional agricultural land that we would like to irrigate, and there's some productive land out there. But there's quite a bit of productive land that has really been taken *out* of service, because it becomes a point at which it is too expensive to pump water from 600 feet, instead of 200 feet, to irrigate a crop. It just makes no sense; you lose money. So, one of the real primary justifications, I think, is laying out the need to replenish the depleted aquifers.

And secondly, these depleted aquifers apply to about, I believe, three-quarters to 80% of all Western rural water-supply systems; they pull it out of the groundwater.

So, there is a real justification there, to, in fact, stop this continual depletion of the groundwater, for either commercial, for residential, cities, and agricultural use. Okay, that's kind of another hidden agenda, that I think NAWAPA can serve.

The gentleman who talked about the time it consumes to do a nuclear power plant review, in the Regulatory Commission and the environment today: He's absolutely right! I'd just say—I don't want to beat a dead horse, though, because we have operated about 120 nuclear power plants commercially, in the United States, and I will bet you that about 110 of them are all different. There have, over the years, been almost no two similar reactors; not totally dissimilar, but dissimilar enough that an entire safety analysis review has to be incurred. These reactors took that information from the previous generation, even if that was ten years prior, and incorporated it, to make a cheaper, more efficient, better running plant for the next one. So, anyway, what I'm telling you, is the Nuclear Regulatory Commission, for all of the faults and the like, they had to deal with about 110 individual reactors.

Riley: I know that those 110, or however many you mentioned, nuclear reactors, it turns out that they hold the U.S. industry safety record over the last 10-12 years, and I think that's fairly significant, based on people's concern about reactors, promoted by the media as a result of Three Mile Island and Chernobyl.

Moss: Don, I agree with you 100%!

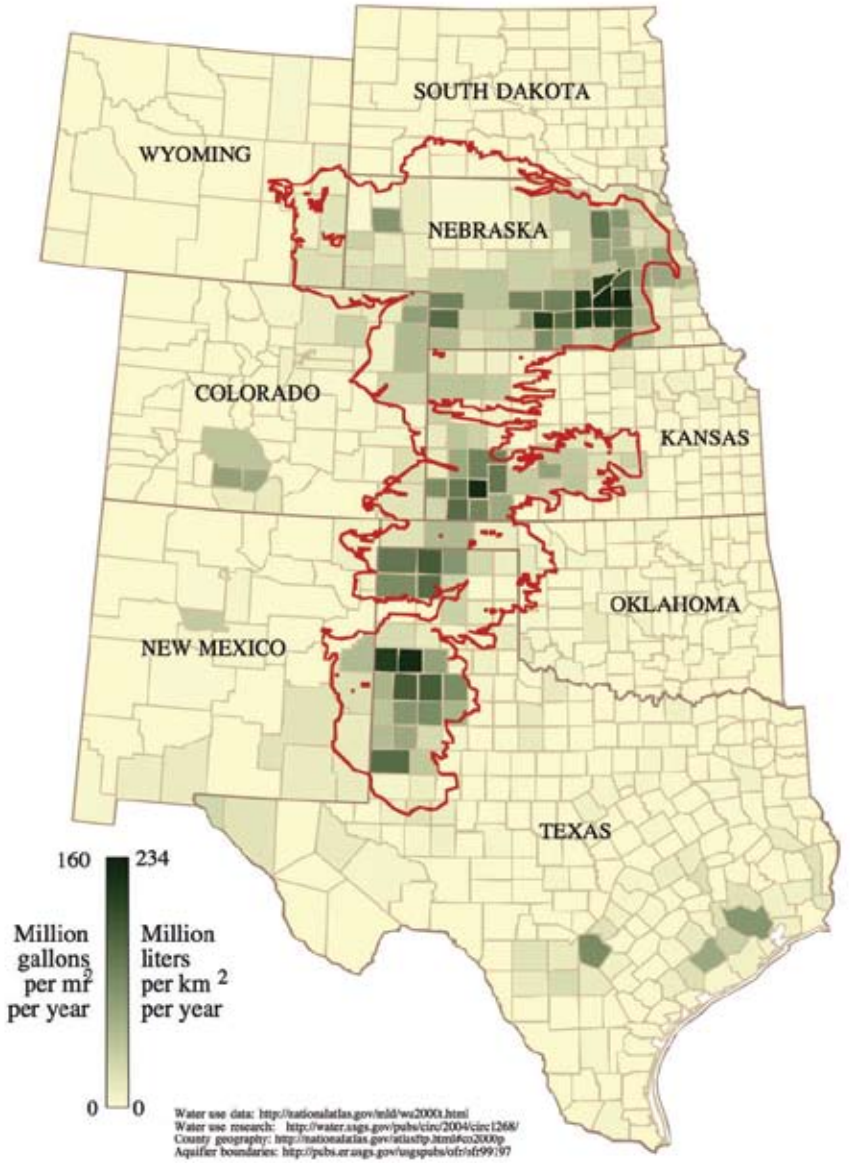
Bates: I do, too.

Christie: I just have one comment here, to kind of refer back to the beginning of the discussion around some of the further implications of NAWAPA and the kind of development programs that we're promoting. Obviously, NAWAPA is isolated to North America—you know, Canada, United States, Mexico; but then, of course, there's the development program through the Darien Gap connecting Central and South America; and the Bering Strait project, connecting the United States and Russia: that this represents a whole break with so-called globalization, where powerful financial cartels and mineral cartels and so forth, run the planet as an empire.

FIGURE 1

Groundwater Withdrawals from the Ogallala Aquifer, 2000

(Estimated, for all uses, by county)



U.S. Geological Survey

The Ogallala (High Plains) Aquifer is being seriously depleted, as are many others in the United States, underlining the urgency of NAWAPA. On the map, the dark red line shows the extent of the huge Aquifer.

This gets back to the concept that the United States has been based on: cooperating with other nations in developing. And I would just refer to the contrast between what happened in Chile, and what's currently happening in Haiti. In Chile, you had a rallying of nations around the world, to put the best of our scientific capabilities to save these miners, and it was a really beautiful rallying point of that kind of common human spirit. Versus what's going on with Haiti, where we're letting that place just rot, and now we're seeing cholera outbreaks.

That these kind of development projects represent getting back to what John Quincy Adams had laid out: a community of principle among sovereign nations. We can all be sovereign nations, we can all have our distinct cultures and so forth, but we recognize a commonality to man, which is that we are creating, which is that we are creative, and we are united around that idea.

So, I'd like to just say that we're at a point where the globalization model of keeping nations backward, preventing them from developing, stopping science and advancement, that era is now over, and we have an opportunity, with NAWAPA and related programs, to strike a new era, which is in a sense an old policy of the United States, of good neighbors.

Teng: I think that's a perfect note to end today's call. We'll be in touch with people individually, and on follow-up developments and follow-up calls, videos, and interviews that we'll want to do. I'd also encourage people, in terms of the issues that were raised to day, to follow up with your own resources, and to talk to other people, people that we have not yet gotten in touch with. I mean, we've had a pretty impressive national mobilization, but I think we've still only scratched the surface, when you consider what is out there in terms of potential. And so, with that, I'd like to thank everyone for being on this call, and we'll be in touch.

U.S.-RUSSIA WAR ON DRUGS

Has Ivanov's Pressure on the U.S. Finally Produced Results?

by Mary Burdman

The potential for cooperation between the United States and Russia was demonstrated early on the morning of Oct. 28, when the first-ever joint effort of Russia's Federal Drug Control Service, Afghanistan's Ministry of Internal Affairs, and U.S. special forces in Afghanistan, ran a successful raid against heroin-producing laboratories in Nangarhar province, on the Afghanistan-Pakistan border.

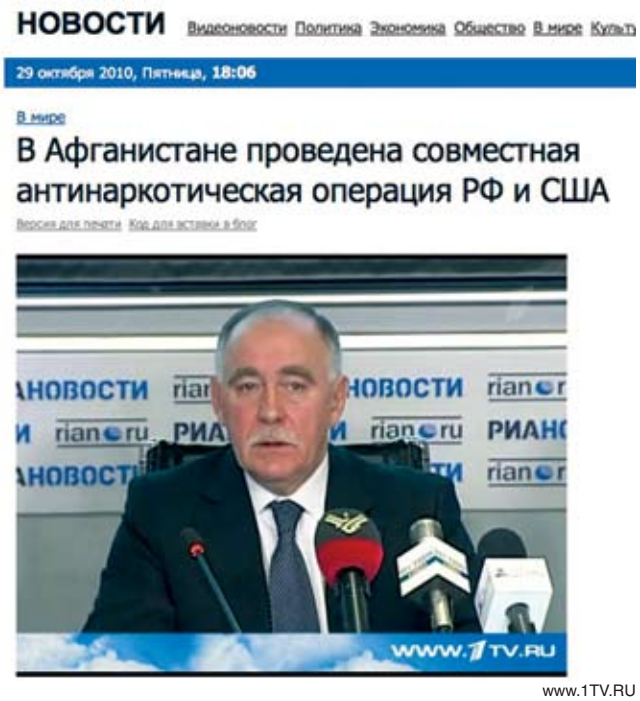
At a joint Russian-U.S. press conference in Moscow the next day, Viktor Ivanov, head of Russia's Federal Anti-Narcotics Committee, announced that over 932 kg—almost a ton—of heroin had been seized, enough for 200 million doses, worth $250 million, the Russian news agency Novosti reported. More importantly, the three heroin labs and one morphine lab all produced for a long-established drug-trafficking route into Pakistan, which was worth an estimated $1 billion to the drug trade, Novosti quoted Ivanov as saying.

But this raid, three months in preparation, after the Russian anti-narcotics service provided the coordinates for locating the labs to the U.S. Drug Enforcement Administration (DEA), is only a first, small step towards taking on what Ivanov rightly describes as the "monster" of the Afghan dope cartels. It is an irony that the so-called "conflicts" between Russia and the United States over dealing with Afghan opium, come from Russia's repeated, specific demand that the DEA and the U.S. military in Afghanistan, act as they have in Colombia, by eradicating the drug crops, including with aerial spraying. Yet, the U.S./NATO International Security Assistance Force (IASF) has repeatedly refused to do just that.

Afghan opium production has exploded under Operation Enduring Freedom, Ivanov told *Russia Today* Oct. 8. Afghanistan produced about 7,000 tons of opium in 2009, enough to make 700 tons of heroin. This glut is so big, that Afghanistan exports less than half; there is far too much for the world's drug addicts to consume. Russia and other countries estimate the stored drugs "at about 13,000-15,000 tons of opium," Ivanov said. "So even if drug production stops in Afghanistan, it will still be able to supply the international market with heroin for another 20 or even 30 years. . . .

"When the U.S. says you can't deprive farmers of their livelihood, it actually sends a message to the Afghan leadership as well, saying they shouldn't do it because, first, this will destroy people's livelihoods and, second, you push farmers into the hands of the Taliban. I think this is merely an excuse.

"Since the U.S. special representative for Central Asia Richard Holbrooke first suggested, almost a year ago, this idea that instead of eradicating drug crops, the U.S. should target drug labs and traffickers, the number of labs producing drugs for Russia *tripled.* A year ago, we knew about 170 labs in Afghanistan; today, we know of more than 400 labs producing drugs for Russia.



www.1TV.RU

Russia's "anti-drug czar" Viktor Ivanov addresses a televised press conference Oct. 29, to announce the successful Russia-U.S. raid on heroin-producing labs on the Afghan-Pakistan border, in which a ton of heroin was seized.

"With more than 70% of coca crops eradicated in Colombia and only 3% [of opium] in Afghanistan, don't you think this is a case of a double standard? In other words, it's not that NATO cannot do it; they do it in one country, but for some reason they do not do the same thing in Afghanistan. When I visited the NATO headquarters in Brussels [on March 24] to address the Russia-NATO Council, I pointed out that more than 2,300 sq. km of coca crops are destroyed in Colombia annually. Yet only 20 sq. km of drug crops were destroyed in Afghanistan last year."

Britain's Dope, Inc.

The force behind this drug explosion is international organized crime, opium lords, including absentee plantation owners who live outside Afghanistan, and the international traffickers running a $500 billion dope trade. This force is a far greater strategic threat than insurgents in Afghanistan, who themselves are funded by the drug trade.

To put an even more precise label on the monster: It is the London-centered and British-run Dope, Inc. apparatus that is behind the opium and heroin explosion in Afghanistan. The greatest expansion of opium production in southern Afghanistan came after 2005, as British forces took charge of the ISAF mission in Kandahar and Helmand provinces. A number of reports have directly linked British forces in the region to heroin smuggling, and it was the British who most aggressively blocked the eradication programs, and made deals with opium lords and Taliban commanders.

As Lyndon LaRouche has repeatedly charged, the British puppet President, Barack Obama, has blocked any comprehensive anti-drug policy from being enacted. Factions in the U.S. government, including the military, who strongly support the Ivanov call for more joint U.S.-Russian collaboration against the opium scourge, have been forced to fly below the radar screen, or, as in the case of Gen. James Jones (ret.), the former National Security Advisor, have been purged altogether from the Administration.

Earlier this year, Secretary of State Hillary Clinton succeeded in funding a small-scale crackdown in Helmand province, conducted by the U.S. Marines, who replaced British troops in the area. But these rearguard efforts, including the recent joint Russian-American operation, will go no further so long as President Obama remains in office.

Drop in the Ocean

In Moscow Oct. 29, Ivanov announced that, "After we gave information to our U.S. and Afghan partners, the three sides planned the operation for three months. We used about 70 special forces units, three landing helicopters and six supporting ones.... The whole operation lasted less than four hours." He called the joint efforts of the anti-drug services, a good example of a "reset" in relations between the two countries. Deputy Head of Mission of the U.S. Embassy in Russia Eric Rubin called the operation "a very concrete example of real cooperation. We cannot succeed alone. This was the first step and we will continue to destroy labs.... This problem [narco-trafficking] has been one of the biggest problems for both the U.S. and Russia and we can cope with it only by working together," he said, Xinhua reported.

However, Ivanov stressed, this raid was just a "drop in the ocean." Powerful and dangerous militarized drug cartels, similar to those in Mexico, have appeared in Afghanistan and the transit countries of Uzbekistan and Tajikistan. The scourge is taking a huge toll: Afghan narcotics killed some 100,000 people a year, 30,000 in Russia alone. Nine years after opium production exploded in the wake of the 2001 invasion, the "drug infrastructure in Afghanistan is expanding," Ivanov said in

Moscow. The number of labs known to Russian intelligence alone, has risen almost 2.5 times in the past two years, from 175 in 2008, to 425 in 2010. "We are interested in further cooperation in destroying drug laboratories. According to our sources, in Badakhshan alone, there are more than 400 drug laboratories, and a large number are located in Helmand. The number of labs is huge."

Advisor to Russia's Foreign Ministry Armen Oganesyan told *Russia Today* Oct. 29, that NATO's reluctance to destroy the dope trade, allegedly because it would deprive Afghan peasants of work, "is insufficient, because we are talking about people's lives." But the Oct. 28 raid sent a message to the drug lords, that NATO and Russia will work together and fight them, he said. "I think it is a very good start, on a very, very long road."

The Nangarhar raid took place less than a week after Ivanov travelled to the U.S., visiting Washington D.C. and California. On Oct. 22, he met with Gil Kerlikowske, director of the U.S. Office of National Drug Control Policy, for the third session of the two nations' joint anti-drug task force. The Russian official has long been calling for military action in Afghanistan, as the only possible way to combat the strategic threat from the drug cartels; this time, inside the U.S., he went far beyond his previous statements, to confront the deliberate stonewalling of Obama Administration special envoy for Afghanistan and Pakistan, Richard Holbrooke, on any effective action against opium production.

"Holbrooke was a bit short of time," Ivanov told *Foreign Policy*, in an interview published Oct. 22. "We started the meeting with him; then he handed us to his deputy.

"The argument that now NATO and Holbrooke are using is that if we destroy poppy crops it will deprive peasants of their livelihood. It sounds so touching that they're taking care of the peasants, but it's not to be taken seriously," Ivanov said, mockingly. "Those peasants do not profit from poppy. They make, at most, $70 per year. Those who profit from it are the landlords living in Europe and America, and the Gulf countries. If we could give the land back to the Afghan government and provide these peasants with wheat, they could easily make their $70 a year growing wheat, not poppy."

Taliban Not the Main Producer

Speaking in Washington D.C. Oct. 22, at a joint press conference after the meeting with Kerlikowske, Ivanov made the bitterly ironic point that "all the 150,000 [IASF] military personnel [are] employed in eliminating a mere 0.2% of the total illicit drug production" in Afghanistan. "In August 2009, the U.S. Congress Foreign Relations Committee released a report titled 'Drugs, Insurgency, and Terrorism,' [and] made an assessment of the volumes of illicit drug production by Taliban … at $150 million." Yet, "all Afghan drug production is estimated at $65 billion, so we can see the Taliban's sector is only 0.2%. Obviously, it is not the main producer. The international forces say they will eliminate only the drug production related to the Taliban, in other words, all 150,000 personnel will be directed to eliminate just 0.2% of the drug production. The remaining 99.8% is left to be destroyed by Afghan forces."

During the Taliban rule (1996-2001), which never succeeded in extending throughout Afghanistan, the opium production reached a record 4,000-plus tons, in 1999. The next year, Mullah Omar, the Emir of the Taliban, cracked down heavily on opium planting, and, as a result, in 2000, production dropped to about 500 tons. Omar had taken ruthless measures.

The IASF fear that eradication will drive masses of peasants into the arms of the Taliban is also absurd—only about 6% of the Afghan population make their living from opium, and this, under complete control of drug lords, the big plantation owners, and traffickers. If the drug lords' power were broken, the peasants could grow other crops, as Ivanov wrote in a commentary published Oct. 21 in the *Washington Times*.

"Stabilization and peace in Afghanistan can only be achieved through efforts that include a decisive fight against the production and trafficking of Afghan heroin," he wrote. "Drug money is seriously undermining international efforts to restore order in Afghanistan, and fueling terrorism elsewhere." U.S. national security is at stake, he wrote. "Among NATO countries, civilian deaths from a heroin overdose are 50 times the number of military casualties in the alliance operation in Afghanistan. Afghan heroin eventually ends up in the United States—ruining lives, devastating American families."

Ivanov was sharply critical of the U.S. refusal to use aerial spraying to eradicate opium plantations, saying that the assumption that spraying would "alienate" the population cannot be considered "convincing, moral or even accurate." While there is some progress in Russian-U.S. anti-drug cooperation, Ivanov wrote,

"we still need to address the core of the problem: opium plantations."

At the Foreign Press Center briefing, Ivanov made clear that Russian anti-narcotics forces grasp the importance of the financial side of the world opium trade. "Drug cartels and barons are major financial players," with the world drug trade being worth some $500 billion a year, Itar-Tass quoted Ivanov. Russia and the U.S. "agreed to exchange experiences related to the confiscation of property of incomes of people engaged in drug trafficking. The final goal of the drug business is to make profit, so it is an important task to expose financial traffic and the flow of money on bank accounts for the purpose of laundering," he said.

Kerlikowske expressed Washington's policy, that the IASF-related anti-drug effort should focus on getting rid of drug labs in Afghanistan, while the local government should deal with the opium plantations. This means doing nothing, Ivanov responded. "The government of Afghanistan will hardly succeed in resolving the problem by itself," he told *Russia Today* in an interview Oct. 22. The "revenues from drug production are $65 billion, and the Afghan government's annual budget is $12 billion, and 90% of this amount comes from financial aid. I will ask a rhetorical question: Can a government with such a small income deal with such a monster as the drug mafia?"

Going After the Labs and Landlords

As for dealing with the drug labs, Ivanov, who had served as an intelligence officer with the Soviet forces in Afghanistan, told the press that Russia has given the U.S. information on about 175 drug labs already. Ivanov told AP in an interview published Oct. 23, that he had provided details to U.S. officials in Kabul months ago, but DEA officials there have told him they are awaiting U.S. military approval to take down the labs. "For some reason they are unable to carry out any operations to destroy these laboratories, because there is a delay from the military side," Ivanov told AP. DEA officials also complain about a lack of equipment and fuel. "We will help them with fuel," Ivanov volunteered.

Ivanov said he also has suggested going after the big landlords in the opium poppy regions, by submitting their names to the UN for sanctions. "It wouldn't be difficult to trace them," he said. He had discussed the issue with Holbrooke and other officials Oct. 21, but, he said, was frustrated because of U.S. adherence to the claim that eradicating poppy fields would send farmers into the hands of the Taliban. "It sounded not like constructive discussion but a manifestation of stubbornness," Ivanov said. "I cannot say they are not listening. They are listening very carefully and attentively. But unfortunately, there are no results."

Ivanov had taken the unusual step of going to Los Angeles, he told *Foreign Policy* to speak out against the California ballot initiative, Prop 19, to legalize marijuana. "I hadn't known about it before, and I was absolutely shocked when I was in the city and saw these posters saying that you can get marijuana for medical purposes," he said. "Medical" marijuana is already legal in the state! Ivanov met with Los Angeles Mayor Antonio Villaraigosa and Sheriff Leroy Baca to voice Russia's opposition to the measure. "I'm afraid that the consequences of [legalization] will be catastrophic. Even the Netherlands, where they sell marijuana legally in coffee shops, they are now reversing on this. Because there, and everywhere, drug addiction is becoming stronger, and the people who are addicted develop psychiatric deviations. They say, 'What does God do when he wants to punish a person? He deprives him of his mind.'"

India, Facing Huge Challenges, Will Host a Depleted American President

by Ramtanu Maitra

Oct. 29—By the time President Barack Obama arrives in Mumbai on Nov. 6, India will be hosting an American President who has just suffered a massive electoral reversal at the Nov. 2 midterm elections. The electoral results will not be a surprise to most, since, during his two years in the White House, Obama's inability, or what many would call his unwillingness, to respond to the economic collapse that has made millions of Americans homeless, and millions more jobless, has led to Washington's loss of trust and confidence among a vast majority of Americans.

New Delhi must realize that it will be entertaining an American President who is obsessed with his own political survival. Some would describe his post-Nov. 2 status as that of a "lame duck" President. Nonetheless, Obama—while facing the wrath of his own electorate, and with his Presidency wobbly, and without a focus—will be representing the United States, one of the four most powerful nations on Earth. It is therefore necessary that New Delhi confront the American President, in no uncertain terms, with the reality of the crises that the world faces today, and what will be required to stabilize the financial and security situations. If the United States participates in this effort, over a period of time, with the technologies and manpower that it can bring to bear, conditions can be created to abolish poverty from the face of this Earth.

Global Financial Collapse

To begin with, New Delhi's prime concern should be to make clear to Obama that its own economic growth is linked directly to the global economy. Over the years, India has moved out of its low-growth, self-sustaining economic and financial world, and is now very much a part of the global economic and financial system. But that integration has taken place at the expense of creating a number of vulnerabilities—a causal effect of globalization. Billions of hot dollars flowing out of developed nations seeking an extra margin of usurious profit in the unregulated emerging markets have pushed up inflation in both India and China—the two fastest growing large economies. Such inflation not only destroys a nation's currency reserves in the long run, but more importantly, causes unmanageable crisis conditions for hundreds of millions of poor who live in India and China, the two most populous nations on Earth.

The process has gotten worse since the Obama Administration chose to bail out the Wall Street and City of London investment bankers and speculators, instead of channeling the money to sectors creating productive jobs. This anti-people policy only helped to relieve a fraction of speculators' colossal debt, while indebting the productive sectors further. As the economic situation in the United States deteriorated, Obama continued to bail out the failed and corrupt Wall Street institutions, further debilitating the productive sectors of America.

On Obama's watch, America's debt burden has grown so big that not even a fraction of it can ever be paid back. A large chunk of taxpayers' money is now being channeled to pay back those debts. Tax revenue is stagnating or shrinking, because of long-term high unemployment, put in place by a policy led from the White House during these two years. New Delhi must make clear to Obama that unless the U.S. economy is put back on track, because of the globalization of financial institutions, the policy exercised by his Administration will stop growth everywhere, leading to an overall collapse of all the economies of the world.

Chaos in Afghanistan and Pakistan

The second subject of discussion with the American President should be the threats the unfocused and unending war in Afghanistan has posed to the Eurasian region. Since the U.S.-NATO invasion of Afghanistan in 2001, Washington has gone about fighting a war

Tehri Dam/Arvind Iyer

WHO/P. Virot

India, like China and Russia, is at a crossroads: Despite significant achievements, like the Tehri Dam on the Bhagirathi River (left), the vast majority of the Indian people suffer crushing poverty (below). Unless the United States dramatically changes direction, including dumping the increasingly autistic President Obama, there is little chance that the nations of Eurasia will succeed.

without clearly defining who the enemy is, and what the U.S. wants to achieve by carrying out a seemingly unending and costly war. Unless those objectives are clear, the future of India's neighborhood remains wholly uncertain.

At the time Afghanistan was invaded, the stated objectives of the United States were to find the alleged perpetrator of 9/11, Osama bin Laden and his al-Qaeda group of terrorists, dismantle the ruling Islamic fundamentalist Taliban regime in Kabul, and set up a stable democratic regime in Afghanistan. In order to achieve these objectives, Washington sought the military help of many countries. Some of them responded guardedly, while others, such as India, did not.

Nine years later, it has become evident that none of the three objectives can be met. Some in Washington continue to claim that the objectives can be met only if the United States and NATO remain engaged in Afghanistan for decades to come. However, such claims are not based on realities on the ground, or even an explanation as to why a long stay, by hundreds of thousands of foreign troops, armed to the teeth, will bring about such an orderly transformation, something which Afghanistan has never experienced in its entire history. This scenario is, instead, based on vacuous words, whose intent is, perhaps, to maintain the status quo, i.e., endless warfare and a strong military presence in the neighborhood of three powerful nations—Russia, China, and India.

However, what the nine years of war in Afghanistan, which has now spilled over into the western frontiers of Pakistan, have achieved so far, is to spread religious radicalism, in the form of Talibanism. This radicalism is no longer based only in Afghanistan, but is now threatening India, Russia, and China, the entirety of Central Asia, as well as Iran and Pakistan. The presence of 150,000 U.S. and NATO soldiers has allowed the jihadis of the world to congregate.

The jihadis have been organized by Britain and Saudi Arabia, and are now located in the tribal areas of Pakistan, where Islamabad's writ does not extend. While the United States had been the magnet in attracting these terrorists/jihadis, Washington has no capability to disperse them. Long before the Afghan War winds down, be that years or decades from now, these jihadis

will engage in destroying the region, pitching terrorist-organized religious and sectarian warfare.

Furthermore, the United States and NATO have not only drawn these jihadis in to settle in the region, they have also provided them with their source of income to arm and train. While a significant amount of the cash that nourishes the jihadis comes from various charities based in Saudi Arabia and Kuwait, a large portion of this money is generated by the opium explosion that took place in Afghanistan since the foreign occupation of Afghanistan began in 2001. Afghanistan, which produced less than 700 tons of opium before the Russian invasion in 1979, saw the opium production grow to 8,200 tons under the watch of the British and the Americans. The year 2009 is considered a lean opium season in Afghanistan, and yet, the opium production will be close to 5,000 tons, which amounts to what all the drug addicts in the world could consume in a year, and still have some left over for a rainy day.

In addition to the funding of the jihadis and explosion of opium and heroin addiction in the region, stretching from Iran to Russia, and Azerbaijan to India, the rapid growth of colossal opium production in Afghanistan has corrupted most of the institutions and banks in particular, as well as the purveyors of these institutions around the region. Many law enforcement officials, surviving on low wages, have become recipients of bundles of opium money, used generously to corrupt them. In other words, the opium explosion in Afghanistan has not only created victims and killers, but has caused the degeneration of a whole range of individuals and institutions not always visible to the untrained eye.

Stabilizing Afghanistan: Agro-Industrial Development

The most fundamental benefit of a successful modern agricultural sector lies in what it builds into the nation. To begin with, it requires power, water, sufficient manpower, development of agro-industries, and a transportation network. A successful agricultural sector needs concerted efforts, and if the importance of the sector is fully understood, and developed in-depth, it acts as a shield against external manipulation. The process itself develops skilled manpower.

Basic agricultural institutions include research and extension services that create agronomists who live in the country, and work to develop high-yield varieties of seeds and to improve undernourished land. Development of water resources, which includes irrigation and water supply to the agro-industries and the population in general, also produces engineers and technicians who build dams, canals, and flood plains. These acts themselves protect the soil, the land, and the environment. In this effort, Russia, China, and India, in particular, along with the United States, could play a significant role.

Security of Eurasia

In addition, what New Delhi must point out to the visiting President Obama, is the growing necessity for India and its Eurasian neighbors, to secure the region. Eurasia supports almost 60% of the world's people, but many hundreds of millions of them have remained victims of utter poverty. China and India, which together account for almost 2.5 billion people, are now engaged in building up their nations, removing the poverty that exists, and making efforts to provide future generations with a better life and the opportunities that come with it.

In this context, what is required is the integration of the Eurasian landmass, through transportation infrastructure, generation of abundant power, management of water, ensuring food security through advancement of modern agriculture and steady supply of raw materials. China has already embarked on building high-speed railroads with the intent of connecting the nations of Eurasian. Both India and China are developing their respective blue water navies in order to ensure safe passage of imports and exports. Both nations require bulk supplies of raw materials, on a regular basis, to keep the development moving forward.

In all this, the United States can, and should, play an important role. On the other hand, pursuing the geopolitical policy that the United States had exercised throughout the Cold War days will not only create serious rifts within the Eurasian nations, but could lead to the brink of world war.

In other words, with the rise of China, India, and Russia, and the willingness among the three to optimize their capabilities in all possible areas of economic activities, has ushered in a situation whereby a participatory role of the United States could act as a glue to the developmental efforts and bring about a stable world. Such participation of the United States in stabilizing the Eurasian landmass will, in no time, bring in Japan, South Korea, and some European nations, with their technological capabilities, to expedite the process.

Without NASA's Manned Space Program, The Chilean Miners Would Be Dead

by Marsha Freeman

Oct. 29—The dramatic Oct. 13 rescue of 33 trapped miners in Chile, which captured the rapt attention of the world, was accomplished through an international mobilization, and the crucial help of American industrial ingenuity and NASA space exploration expertise.

On Oct. 28, American industry officials and NASA experts were invited to the White House to be congratulated on their success. It had been announced in the morning that President Obama would appear with the U.S.-Chile team in the Rose Garden to give a statement. He never showed. Perhaps he was afraid that *EIR* would ask if there would have been a successful rescue, if his program to shut down the space agency's manned space program had been carried out.

At a brief exchange with the press, following the meeting between President Obama and the U.S.-Chile team, *EIR*'s Bill Jones directed a question to the NASA officials.

Jones said to NASA Administrator Charlie Bolden: "I'd like to address at least one question to the NASA people present. Is it not the case that this tremendous rescue was only possible because of what we had learned during five decades of manned space exploration?" Bolden, somewhat taken aback at being in the center of attention, nevertheless came forward.

"Yes," he said, "it is a result of the 50 years of experience in space flight, by the understanding acquired by human space flight, and by the engineering capabilities developed there. For instance, the doctors here who were there, can tell you how important their knowledge of the psychological and physical conditions in space were."

Bolden then called on Dr. Michael Duncan, who had led the NASA team in Chile, to comment. "Five decades in space flight were very important for this. In particular, the lessons in long-duration space flight gave us important insights into how to manage this difficult situation." He then praised the work of the Chilean teams that were engaged at the site.

Unstated was the fact that Obama still insists on shutting down the manned space program. As Lyndon LaRouche remarked, if Obama had been President earlier, the miners would have died.

The Rescue Plan

Seventeen days after the collapse of a gold and copper mine in Chile trapped 33 miners more than 2,000 feet underground, a hand-written note they sent to the surface reported that all of the men were alive and well. The people and government of Chile were greatly relieved. They now faced the task of keeping the men alive and in good health, mentally and physically, and devising a plan to rescue them.

On Aug. 25, NASA experts in human health at the Johnson Space Center in Houston reported that they had been contacted, through the U.S. State Department, by the government of Chile, to engage their support for the trapped miners. NASA's Johnson Space Center is responsible for the training of astronauts, their health and performance while they are in space, and through Mission Control, is their link to the rest of society.

Johnson experts were asked to provide "technical advice related to life sciences," including effective psychological support for the trapped men, who, it was expected, would have to wait months to be rescued. Over the past 50 years of human space flight, NASA has had extensive experience in dealing with a broad range of psychological issues, in otherwise healthy individuals, during long-duration space flights. Space exploration involves one of the most intensive experiences in social isolation. NASA has also had extensive experience in solving, and preventing, such problems.

A week later, a team of four NASA experts traveled to the mine site. Actually, NASA astrobiologists were already familiar with the mine's Atacama desert terrain, since teams of scientists have spent time there, studying this driest region on Earth as an analogue to the deserts of Mars.

On Sept. 7, at a press briefing in Houston, the NASA team reported on its three-day visit to the mine. They

Government of Chile/Hugo Infante

Miner Mario Gomez steps out of the NASA-designed capsule (seen behind him), which brought each of the 33 Chilean miners and several rescue workers, one by one, safely to the surface. NASA's decades of experience in developing the technology for the space program is largely responsible for the success of the rescue mission.

described the overall effort underway as "very impressive." While NASA astronauts have faced many extreme situations, the plight of the miners is "unprecedented in scope," stated Dr. James Polk, NASA chief of space medicine, because there are so many of them, so far down, for so long.

He explained the intricacies of re-feeding people who are starving, and that the Ministry of Health had managed to do that without any harm to the health of the miners. For 17 days, with no contact with the outside world, the miners had rationed a couple of days worth of supplies, each eating a spoonful of tuna fish and one of milk, every other day, to keep everyone alive.

Dr. Duncan, who led the NASA team, explained that the Chilean Space Agency had facilitated their visit. The experts from both countries agreed that what had kept the miners alive until contact was made, was their ability to organize themselves under a leader, and into groups, each with a specific area of responsibility. Theirs was a complete commitment to be prepared to be rescued.

After contact was made with the miners, they were able to receive supplies through a six-foot-long tube (*paloma*, or dove) that was lowered down through a small hole that had been drilled. This 24-hour-a-day operation delivered food, water, cots designed to fit into a tube with a 4-inch diameter, medicine, books, and other supplies.

Throughout the following weeks, the NASA health experts were in continuous communication with the Health Ministry, regarding diet and nutrition, exercise, social organization, and also issues related to the miners' readjustment after rescue, at the request of the Chileans.

A Below-Ground 'Space' Capsule

As the nutritional, health, and medical requirements of the miners were being met, the race began among three different drilling rigs in the effort to reach the miners as quickly as possible. Due to the depth involved, and the hardness of the rock, the most advanced, and, in some cases, yet-to-be developed, drilling technology was needed.

All three of the drills that were engaged to free the miners suffered breakdowns and damaged parts, and had to be stopped at various times. Engineers back at their U.S. companies raced, not just to replace, but to improve their drill-bit design and manufacture, to operate in an environment they had never encountered before.

In the end, it was the American-made Schramm T130 drill—which was sent to Chile along with two expert drillers, and two Spanish-speaking assistants—which was the first to bore through the rock, and reach the miners, on Oct. 10. The rig and crew, had previously been drilling water wells in Afghanistan.

As soon as the miners were located, work began to design a capsule that would fit inside the 26-inch hole made by the drill rig, to bring each miner to the surface.

The NASA medical team that had traveled to Chile in early September also included a NASA engineer, Clint Cragg, who is a principal engineer at the Engineering and Safety Center at NASA Langley. He had been the commander of the U.S. Navy submarine, *Ohio*, before joining NASA seven years ago.

U.S. Embassy, Chile/Cicilia Penafiel

NASA engineer Clint Cragg (right) consults with René Aguilar, deputy chief of rescue operations for the Chilean mine disaster. Cragg, a former submarine commander, assembled a team of 20 NASA engineers, to devise the capsule that brought the miners to the surface.

Cragg had been assigned to support the NASA doctors, in case there were any technological device NASA could provide for the miners. While he was there, he had the opportunity to talk with a Chilean submarine skipper, about how the rescue operation efforts were evolving.

Cragg reported on Sept. 9, when he had returned from Chile, that the extraction capsule, about 13 feet long, would have to fit through a 26-inch diameter shaft. He offered to help put together suggestions on design criteria that could be used to evaluate ideas for the rescue capsule, which were being developed by three Chilean companies. When he returned to the U.S., he received an e-mail, taking him up on his offer. Cragg knew that while submariners spend time in isolated environments, only astronauts spend days in craft so small, there is basically only room for them, and the necesary equipment. That is what the capsule designers were facing.

Cragg went back to Virginia, and assembled a team of 20 NASA engineers, "from almost every [NASA] center around the country," who spent three days, hammering out "a 12- to 13-page list of requirements for the capsule, and sent that to the Chilean Minister of Health."

The 75 suggested design features included that the capsule be built so a single miner could get himself in and secured. (The last man out would have no one to help him.) The NASA engineers recommended that the cage be equipped with an oxygen tank, that it be coated to reduce friction as it traveled up and down the shaft, and that it be open for air flow, but covered on top with mesh, in case there were any falling debris.

The engineers suggested that there be voice and video communication with the miner on the way up, to be able to monitor his physical and psychological status, and to be able to immediately identify any problem.

The capsule should be self-aligning to stay vertical and not tilt, they recommended. NASA had donated a special liquid diet for the miners to start taking when the bore hole reached them, designed to prevent nausea from any rotation of the capsule on the way up. This is similar to the problem suffered by about half of the people who have to adjust to microgravity during space missions.

"After we had sent the requirements," Cragg reported on Oct. 13, "I got some communication from one of the Chilean Navy commanders intimately involved in the design process of the capsule. He told me that they had incorporated most of the suggestions we had provided to them."

After the rescue of the miners, International Space Station commander, astronaut Doug Wheelock, speaking for the international crew of six, sent an audio message to the miners and the Chilean people, which he said he wanted to "pass along from outer space." He commended the "heroes below and above the ground," and congratulated the miners on their perseverance.

When the spacecraft carrying the Apollo 13 astronauts to the Moon suffered a catastrophic fuel tank explosion, imperiling the lives of the crew, flight director Gene Kranz told his team that "failure is not an option." When politicians in the control room worried that this would be a disaster for NASA, Kranz retorted: "I believe this will be NASA's finest hour."

Cragg said that one of the things that he will remember from this experience "is [that] our agency has a lot of exceptional people. The 20 or so engineers who offered to drop everything and work with me for three days to put this requirements list together really exemplify the things that NASA stands for."

Everything that NASA stands for, is what President Obama had proposed be dismantled, in his push to end manned space flight.

The Argentine Leader Took on the Financial Hit Men; Rescued His Nation

Oct. 31—The sudden death last week of former Argentine President Néstor Carlos Kirchner, age 60, stunned and shocked his nation. The gutsy Argentine had been a pivotal leader in the nation's life for the past seven years, first as President from 2003 to 2007, when he saw the country through the worst economic crisis in its history, by defying the International Monetary Fund (IMF) and its allied speculative vulture funds.

Then, after his wife, then-Sen. Cristina Fernández de Kirchner, succeeded him as President in 2007, he took the reins of the Justicialista (Peronist) Party, was elected to Congress, and more recently, was elected as Secretary-General of the regional Union of South American Nations (Unasur). He looked forward to reviving the regional integration and cooperation that had stalled in recent years, and was also reportedly considering another run for the Presidency in 2011.

It wasn't just shock that characterized the popular response to Kirchner's Oct. 27 death from a massive heart attack, however. As reflected in the 24-hour wake in the Hall of Latin American Patriots in the Casa Rosada, the Presidential Palace, where Kirchner's body lay in state, and then, in the farewell demonstrations on Buenos Aires streets, the death of the former President also catalyzed an outpouring of national pride. This is rooted culturally and historically, not only in the movement created by Gen. Juan Domingo Perón in the 1940s and 1950s, which both Kirchner and his wife joined as college students; but also in Argentina's longstanding hatred of the British Empire, dating back to the Empire's 1833 seizure of the Malvinas Islands, which, at the time, were part of Argentina's territory.

British imperial efforts to crush Argentina have failed to stamp out this nationalist sentiment, which as in vibrant display during last May's five-day Bicentennial celebrations. Combined with a sense of optimism and pride in its impressive scientific and technological achievements, this underlying nationalism is what makes Argentina so dangerous to the Wall Street and London financial predators who have continuously sought its destruction.

'Argentina, Argentina, Argentina!'

The financial hit men for whom Kirchner was their worst nightmare, gloated over his death, and predicted that President Cristina Fernández will be too weak to govern the country, and will be forced to make concessions to the more "pragmatic" political opposition.

International bankers and hedge fund managers chortled over the rapid spike in the value of Argentina's bonds on international markets that occurred within hours of Kirchner's death. Kirchner's "populist" policies made many enemies during his term in office, the *Wall Street Journal* explained. Now that he's dead, investors are optimistic that his passing "will pave the way for the country to shift to more market-friendly policies."

The City of London's *Economist* predicted that "political upheaval" would follow Kirchner's death, while Bank of America analysts expressed certainty that President Fernández would never be able to gather the necessary support to run for reelection in 2011. There is now a vast "political vacuum" in Argentina, Goldman Sachs gloated.

These London and Wall Street swine who are salivating over the prospect that Argentina can be brought to heel, may be in for a nasty surprise. They don't have a clue about the deeply rooted cultural tradition that the former President's passing has put into motion.

The estimated 100,000 people, a majority of them workers and their families, as well as a very large contingent of young people, who filed through the Casa Rosada during the 24-hour wake, were not only paying tribute to Néstor Kirchner, they were also offering their support and encouragement to his widow. "Be strong," and know that "millions are with you," the mourners told Cristina.

Presidencia de la Nación Argentina

Néstor Kirchner saw his nation through its worst economic crisis. Shown: The Kirchners celebrate Cristina Fernández's election as President of Argentina, Oct. 25, 2007.

Upon learning of the former President's death, Hugo Moyano, the head of the Peronist CGT labor federation, announced that Fernández would have the CGT's full support in the crucial task of "deepening the economic model" that both she and her husband backed.

Several commentators were astonished at the magnitude of the popular response, noting that nothing like it had had been seen in the country since the death of Juan Perón in 1974. Tens of thousands lined Buenos Aires's streets, standing for hours in the pouring rain, while thousands more gathered in the city of Rio Gallegos, in Kirchner's beloved Santa Cruz province, where he was buried. The area in front of the Casa Rosada and in the historic Plaza de Mayo was filled with people, Argentine flags, floral wreaths, banners, pictures of Néstor and Cristina, or of Juan Perón and his wife Evita.

Though somber in tone, the wake was punctuated by frequent impromptu *political* statements and applause from tearful citizens, who thanked the former President for improving their lives during his term in office, while expressing the certainty that the current President would continue to do the same. When the funeral procession left the Casa Rosada and began wending its way through city streets to the Jorge Newberry airport, it was greeted with shouts of "Argentina, Argentina, Argentina," from citizens who equate Néstor Kirchner not only with the defense of their interests, but also of the nation's sovereignty.

One of the most touching moments of the wake was the musical tribute from a young opera singer, who was clearly also political. As he approached the coffin, he began singing Schubert's *Ave Maria* in a rich baritone, immediately capturing the President's attention while onlookers fell silent around him. Deeply moved, the President remained standing as the young man sang, and then ended his tribute by raising his fist in the air and shouting "Hasta la victoria, Néstor" ("To victory, Néstor!"). The President went to the line to thank the young singer for his musical offering and embrace him warmly.

LaRouche: 'He Will Be Missed'

The international response to Kirchner's passing was also impressive. Messages of condolence and support poured into the country from around Ibero-America, where the former President had been a leader of the informal "Presidents' Club" of Ibero-American heads of state, formed to promote the continent's physical integration in opposition to IMF looting policies. Eight Ibero-American Presidents attended the wake, and almost every government on the continent declared at least one day of national mourning.

Leaders from Europe, Asia, Africa, and the United States also sent their condolences, among them Lyndon LaRouche, who said simply: "I would like to personally send my condolences to his wife and family. He will be missed."

Why? Néstor Kirchner had guts. He stood up to the IMF in order to save his own country, but also acted regionally and internationally in search of a new "international financial architecture" to replace fascist globalization.

The Sept. 14, 2005 speech that Kirchner instructed

his Foreign Minister Rafael Bielsa to give before a special session of the UN General Assembly was a case in point. Representing the Rio Group of nations, Bielsa called for "reforming the international financial architecture, [which is] anachronistic and ineffiecient." The current system, he said, "places concrete obstacles in the way of building the necessary favorable economic environment" for development, job creation and ending hunger."

Bielsa pointed out that, "there are many experts, specialized groups and leaders throughout the world who are promoting a new call for an international conference of heads of state, similar to the 1944 Bretton Woods conference, to rebuild a more just global monetary and financial architecture which eliminates financial bubbles and concentrates on supporting the real economy."

With these remarks, the Argentine government joined a growing chorus of voices internationally, echoing LaRouche's call for a New Bretton Woods conference. This was a significant positive proposal for a solution to the global financial crisis.

From Hell to Purgatory

Kirchner took office when the country was in the depths of an unprecedented crisis, and began to gradually reverse it through the "heterodox" policies of regulating and protecting the economy, which are anathema to the IMF and its City of London accomplices.

In December 2001, following more than a decade of the IMF's criminal free-market policies, Argentina defaulted on $85 billion in foreign debt, and then, in early 2002, sharply devalued the peso, with devastating results. By the time Kirchner was elected in May 2003, unemployment stood at close to 25%, and an unheard-of 57% of the population was living in poverty. In one of the world's premier agricultural producers, where previously no one went hungry, desperate citizens dug through the garbage in search of food, or articles they could sell or barter for food.

Under these conditions, Kirchner stated that he would not subject the Argentine people to more of the same "structural adjustment" policies which had caused the crisis in the first place.

"I received an Argentina devastated by an economic program supported by the International Monetary Fund," he explained to a Berlin audience in April 2005. The IMF model had been "imported and imposed" on Argentina, unleashing the "worst social-economic catastrophe in our history, which exploded at the end of 2001." This catastrophe, he said, was the product of a "political-economic model at the service of interests *alien to the common good,* which favored the proliferation of the corrupt, genocidalists, and thieves."

Kirchner infuriated the IMF and the speculative vulture funds it protected, not only by refusing to bend to their demands, but by also trumpeting to the world that it was possible to fight and win against those who sought the destruction of sovereign nation-states. He described the fight with the financial sharks as "minute-to-minute, hand-to-hand combat."

In the September 2003 annual meeting of the World Bank and IMF in the United Arab Emirates, Argentine Finance Minister Roberto Lavagna unveiled the government's daring plan to restructure $85 billion in defaulted debt with a 75% writedown. This meant that bondholders, a large number of which were vulture funds, would receive only 25 cents on the dollar.

International bankers and vulture funds went ballistic, terrified that Argentina's action might induce other developing nations to follow suit. Some of the more notorious vulture funds, such as those of billionaire Kenneth Dart or Elliot Associates, sprang into action with legal suits and seizures of Argentine assets around the world, in an attempt to bludgeon Kirchner into submission.

LaRouche, at the time a U.S. Presidential pre-candidate, responded bluntly: These speculators are "fascists, just like those who put Hitler in power.... Now you're looking fascism in the face, and if you want to characterize it, you would say about the vulture funds' reaction, this gives you the mentality of the same kind of fascists who sacrificed the human race, including all those who died eventually in Auschwitz. This is why people died in Auschwitz, because these vulture funds had to have a government which would do the kind of job they demand."

On March 3, 2005, the Argentine government successfully concluded the debt swap, leading Kirchner to assert that one of the "greatest obstacles for the economy has now been overcome."

On April 15, 2005, a little over a month later, Kirchner told an audience in Germany that, "there is life after the IMF, and it's a very good life." Remember, he added with characteristic humor, "being in the embrace of the IMF isn't exactly like being in heaven."

Perón and FDR

Kirchner's economic policies were grounded in Peronist nationalism. But as then-First Lady Cristina Fernández explained in a March 2007 speech in Quito, Ecuador, her husband's thinking had also been influenced by Franklin Roosevelt's New Deal. At the time of her speech, Argentina was leading the continent in real economic growth of 9% annually.

Speaking before the Latin American College of Social Sciences (Flacso), Fernández recalled that FDR understood that public works and infrastructure projects could serve as the motor to revive the devastated U.S. economy of the 1930s. Néstor Kirchner copied that New Deal policy when he was Governor of Santa Cruz, and now as President. "We understood the multiplier effect that [infrastructure development] had, both economically and socially. Economically it gave birth to industries . . . it provided basic infrastructure required for economic activity, so that businessmen could carry out their activity using railroads, communication systems, airports; and society could do the same, with hospitals, schools, potable water, housing. It's all a virtuous cycle, that also re-creates a country's confidence in itself."

Under Kirchner's leadership, the "Presidents' Club" moved in the direction of promoting the continent's physical and economic integration, as an alternative to savage neoliberalism.

In November 2005, the Presidents' Club delivered a stunning defeat to the Bush-Cheney Free Trade Area of the Americas (FTAA) proposal at the Summit of the Americas in Mar del Plata, Argentina, greatly alarming the British financier interests that controlled the U.S. President at that time. Not only did Brazil's often pragmatic President Lula da Silva back Argentina's intransigent opposition to the FTAA at this meeting; a month later, Argentina and Brazil coordinated a surprise move to pay off the entirety of their respective debts to the IMF, in an effort to deflate the IMF's ability to impose asphyxiating economic conditionalities on their countries.

Kirchner also acted as a mentor to Ecuador's young President Rafael Correa, whose profound grief was evident as he eulogized the late President in Buenos Aires on Oct. 28. The Argentine President also reined in Venezuelan Hugo Chávez where he could, to prevent this British asset's frequent episodes of insanity from sabotaging the sometimes fragile regional alliance.

LaRouche remarked on July 10, 2006 that Néstor Kirchner's leadership within the "Presidents' Club" was key to the consolidation of an emerging South American alliance.

And the United States?

President Kirchner didn't hesistate to challenge the United States to abandon its role as the enforcer of London-spawned globalization, and establish a more positive relationship with its neighbors to the south.

Speaking on Sept. 27, 2007, in New York, at a Global Initiative gathering organized by former President Bill Clinton, the outgoing Argentine President offered advice to the next U.S. President, and to a United States he referred to as "beloved."

He expressed his desire "that the United States become much closer to the region. It would be very important. This is a country whose closeness we value, and whose absence we feel when it distances itself from us."

"In recent years," the Argentine leader said, "we never felt we were supported by the United States. . . . We had different visions of the solutions that had to be offered to the world. But, all of our efforts tend toward—and we're sure that future U.S. administrations will also do this—seeking points of agreement with a region that will have to be very important for the United States of America, and that is all of America, all of Latin America."

Kirchner then underscored, "we really hope that we can come together with the United States in the task of building together, to be able to complement each other; and it's not the help that's so important, but being able to work together to jointly build a better society that, we have no doubt, our brothers and sisters here in the United States also aspire to."

Kirchner minced no words in describing the "disastrous" effects that IMF and World Bank policy had had on his country, and pointed to the irony that, with its supposed financial (free-market) "orthodoxy," the U.S. today has a huge deficit, while Argentina's "heterodox"—anti IMF—policies, have allowed it to grow enormously and generate a healthy surplus. Chastising the Bush Administration, he noted that if, "during the crisis of 2001-02, the U.S. had responded differently to Argentina"—without the bludgeoning that followed its debt default—"the contradictions would not have intensified as they unfortunately did" in the country, or caused such dire consequences.

Pam Am 103

Blair, BP, and Libya: The British Cover-UP

by Scott Thompson

On Dec. 21. 1988, Pan Am 103 exploded over Lockerbie, Scotland, in the terrorist murder of 259 passengers on board (mainly Americans) and 11 people on the ground. The sole person convicted of this terrorist butchery, was former Libyan intelligence officer Abdelbaset Ali Mohmed al-Megrahi. Before examining the reasons why Megrahi was likely framed in a British-orchestrated sabotage of the investigation of the Pan Am 103 bombing, I shall first briefly review the role played by Tony Blair, British Petroleum (BP), and the highest levels in Britain, in the release of Megrahi without acquittal.

Blair Sets the Ball Rolling

At a time when all European governments and the United States had broken diplomatic relations with Libya, after numerous Libyan terrorist and other hostile actions, Britain's "New Labour" Prime Minister Tony Blair became the first leader to restore relations with Tripoli. And, for deals that were lucrative for BP, he set in motion the release of Megrahi, without his likely innocence having being proven. Blair himself has handsomely profited from such deals, since resigning from office. The operation began in 2001, with the spadework of then-MI6 chief of the Mideast and Africa Department, Sir Mark Allen.

By 2003, Blair had restored relations, after personal contact with Libyan dictator Moammar Qaddafi. Blair's co-conspirators: billionaire financier Lord Jacob Rothschild, the head of the British Rothschild dynasty and the Inter-Alpha Group of Banks; his Foreign Policy and Defence Adviser Sir Nigel Sheinwald, now the British Ambassador to U. S.A., where he is closely engaged with Blair's friend, President Barack Obama and his inner-circle of handlers; and Prince Andrew, the British Trade Representative.

Both before and after his time in office, Blair was close to top BP executives. He made two of them Life Peers. He appointed more of them to key subcommittees of his government, than executives from any other company. He regularly dined with Lord Browne, whom he had made a Peer, and the then-BP CEO, who lobbied Blair for the release of Megrahi, so that BP could fulfill Qaddafi's demands for major oil and gas deals worth billions.

It was on Browne's watch, that the Texas BP oil refinery exploded in March 2005, killing 15 and injuring 80, because BP refused to shut down the refinery to repair more than 500 safety violations. Thus, BP was on

Blair's "deal in the desert" with Libyan dictator Qaddafi, led to the release of the accused "Lockerbie bomber," to the benefit of British Petroleum, and also, Blair's bottom line. Shown (above): Blair and Qaddafi; (left) the wreckage of Pan Am Flight 103.

felony probation, when in 2010, the Deepwater Horizon oil rig exploded for the same reasons, killing 11 workers, and causing as yet unknown billions in environmental damage and loss of jobs, in the worst spill in world history. So close was Blair to BP, that it became widely known as "Blair Petroleum."

In 2007, shortly before resigning, Blair made his second official visit to Tripoli, accompanied only by Sheinwald, and negotiated the infamous "deal in the desert" with Qaddafi. This was a broad-reaching accord covering everything from intelligence sharing and military training and supply, to major oil and gas deals, of which BP was the primary beneficiary. Included in the accord, was a Prisoner Transfer Agreement (PTA), which Qaddafi made clear applied only to the Megrahi case, and upon whose fate all other deals with Britain rested.

When Blair was made Special Envoy for the Mideast Quartet, Blair made numerous "secret" trips to meet "Moammar," and discuss lucrative business deals. According to Qaddafi's favorite son, the Anglophile Saif al-Islam al-Qaddafi, heir, and special British representative, Qaddafi had given Blair a highly paid position on the board of the $100 billion-plus, Libyan Investment Authority (LIA). Families of U.S. victims of Pan Am 103 immediately cried foul, accusing Blair of accepting "blood money."

Thus, last August, Blair made another hush-hush trip to Tripoli, which is known only because high-level Libyan officials briefed the local press, where Qaddafi "greeted and entertained Tony, like a brother." Blair asked Qaddafi's help to hide his role in the LIA; They set up deals, such as for British-originated J.P. Morgan, which paid Blair £2 million a year for precisely such openings. And, most importantly, Blair asked Qaddafi to save BP. After the Deepwater Horizon disaster, Congress had banned BP from drilling offshore in U.S. waters for seven years, and its stock price had been cut in half, while it was facing major lawsuits and possible criminal charges, making it ripe for takeover. One week after this meeting, BP announced plans to drill deep into Libyan waters.

As Prime Minister, Blair had asked Lord Jacob Rothschild to take a position on the board of the LIA, to convince it to open an office in the City of London. Lord Jacob failed at the time to convince the LIA to open a British office, and resigned in 2009. However, shortly after Megrahi's release, the LIA opened a front, the Dalia Advisory Ltd., right next to Blair's posh London office, stating it had an initial $5 billion to invest in debt-strapped Britain.

Saif Qaddafi has twice been a special guest of Queen Elizabeth, with whom he discussed the release of Megrahi. The Queen gave her advice and consent to all her prime ministers' dealings with the Pan Am 103 affair, from the initial investigation under then-Prime Minister Margaret Thatcher, to the "deal in the desert" (including the Prisoner Transfer Agreement), to the progress up to release of Megrahi, and its aftermath.

The Deal To Release Megrahi

Under Gordon Brown, who became prime minister in May 2007, the PTA was ratified, and Libya immediately asked for Megrahi's release under the terms. When action was not immediate, Libya held up action on BP's contracts for six months, causing Brown's Justice Secretary Jack Straw to write his Scottish counterpart Kenny MacAskill (in a letter that was leaked), telling him that negotiations with Libya had entered a "critical stage," and it was "in the overwhelming interest of the United Kingdom," to apply the PTA, to Megrahi. Straw later admitted that trade relations, "particularly the BP case," had been his reason. Former BP executive Straw wrote the letter after Sir Mark Allen telephoned Straw to brief him on BP's difficulities, and lobby for Megrahi's release. This contradicts BP's official statement that it never lobbied for Megrahi's release.

Also, Brown himself met Qaddafi in a sidebar meeting at a G8 Summit, and discussed the terms of Megrrahi's imminent release. This is known from a letter Brown sent to Qaddafi. However, when Brown came under attack after Megrahi's release and there was an outcry from all sides of Parliament, Brown refused to answer a myriad of questions, such as whether the BP deal had influenced the decision, or precisely what role he played.

Upon Megrahi's arrival to a hero's welcome in Tripoli, Qaddafi praised "my friend Brown, the Prime Minister of Britain, his Government, the Queen of Britain, Elizabeth, and Prince Andrew, all of whom contributed to encouraging the Scottish government to take this historic and courageous decision, despite the obstacles." Either Brown and the Queen could have blocked Scotland from releasing Megrahi.

However, for Megrahi to obtain early release on "compassionate [medical] grounds," he first was forced to give up his rights to second appeal forever. This appeal had been ordered on June 27, 2007, by the newly created Scottish Criminal Cases Review Commis-

sion—based on substantial indications that he "may have suffered a miscarriage of justice" in his trial. Despite objections from the Crown, judges had ruled that he could appeal on any grounds, subject to ruling by the Court of Criminal Appeal in Edinburgh.

On Aug. 2, 2009, Megrahi was released, and flown back to Tripoli, accompanied only by Saif Qaddafi. Fifteen months later, Megrahi was living with his family in a luxury townhouse supplied by the Libyan government, and receiving treatments for cancer.

Thatcher Sabotages the Investigation

Megrahi's alleged accomplice was found innocent Jan. 31, 2001, in a trial in Zeist, The Netherlands, a critical blow to the prosecution's "conspiracy" arguments.

The official UN Observor at Megrahi's trial, Dr. Hans Köchler, wrote that the trial was highly poliicized; Megrahi's conviction was based solely on circumstantial "evidence"; that, of the two main witnesses for the investigation upon which the prosecution was based, one had positively identified another initial suspect, failed to identify Megrahi 17 times, and had to be led by judges to identify Megrahi at the trial; the other major witness was to be paid $4 million for his testimony; testimony from responsible witnesses, that contradicted the "evidence" presented by prosecution was dropped; exculpatory documents were withheld; and, so forth. Further, at least one responsible witness who could have given testimony that some "evidence" had been manufactured by the investigators—namely the timer device used—was not even acknowledged by the prosecution.

Köchler's observations were corroborated by other witnesses of the trial, and by U.S. and U.K. intelligence and law enforcement authories.

The original theory for who was responsible for the bombing of Pan Am 103, was that it had been ordered and paid for by the Iranian fundamentalist regime, in direct retaliation for the downing by the *USS Vincennes* of an Iranian Airbus, which caused 190 civilian deaths, including that of 60 children. With only slight variations, depending upon the nation and intelligence agency, the original theory held that Iranian officials subcontracted one of Syria's 15 intelligence agencies, which, in turn, hired the Damascus-based, Popular Front for the Liberation of Palestine-General Command (PFLP-GC), headed by terrorist Ahmed Jibril, who had only recently sworn to attack U.S. and Israeli aircraft. Some in a PFLP-GC cell in Germany had just been arrested making bombs similar those which downed Pan Am 103, and studying Pan Am schedules. The German intelligence organization BfV stepped in at last moment, only a short time before the Pan Am 103 bombing, but Jibril's right-hand man escaped the operation "Autumn Leaves" arrest, apparently with one of the bombs.

But, as the late columinist Jack Anderson, who regularly leaked highly classified intelligence with impunity, wrote in a January 1990 *Washington Post* story, in December 1989, then-British Prime Minister Margaret Thatcher telephoned President George H.W. Bush, demanding that the Iran-PFLP-GC investigative theory, be dropped. The reason Thatcher gave, according to Anderson, was that the allies would be "impotent" to retaliate.

Some reliable sources report that what Thatcher meant by this, was that preparations were then underway for the first Gulf War, and the U.S. and the U.K. could not retaliate against two of Iraq's neighbors under the circumstances. In any event, Anderson added, Bush agreed, and henceforth there were no more official statements about Iran and PFLP-GC; and the U.S. and U.K. investigations shifted to focus on the then-terrorist haven Libya. According to reliable sources. Megrahi would likely to have been found "not guilty" on appeal. And, if he had been found innocent, it would have reopened the Pan Am 103, investigative can of worms (almost two decades after the bombing) and exposed the British sabotage.

Getting at the British Role

Today, there are two separate investigations into the Pan Am 103 affair: One is by Senate Foreign Relations Committee Democrats from New York and New Jersey, whose citizens suffered the majority of murders; the other is by Secretary of State Hillary Clinton. The committee's investigation is known to focus narrowly on some of the British diplomatic and intelligence officials and top BP executives, who are believed to have been responsible for Megrahi's release. After these subjects refused to testify, and the originally scheduled hearings had to be postponed, newly elected Tory Prime Minister David Cameron paid his first official state visit to Washington. He told Nerobama and the Senators, in a private meeting, that the release of Megrahi had been a "mistake," indicating to the latter that he would request an inquiry. However, on his return to london, Cameron reversed himself, and all U.K. officials are stonewalling co-operation with both investigations.

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HEIDI MAYER

Homeless, Starving Children: Americans Are in Denial

Heidi Mayer

Heidi Mayer is the executive director of YouthHope, a non-profit organization in Redlands, Calif., that provides services to youths aged 14-24, "to build confidence and promote self-sufficiency for homeless and runaway youth by providing trust, hope, support, and education." Redlands, a city of approximately 65,000 people, is located in San Bernardino County, about one hour east of Los Angeles. On Oct. 28, RealtyTrac ranked the Riverside-San Bernardino-Ontario region of Southern California as 6th in the nation in foreclosures, with one home out of every 41 having a foreclosure notice filed against it.

On Oct. 20, the Contra Costa Times *reported that there were 22,658 homeless school children in San Bernardino County during the 2009-10 school year, an increase of 20% over the previous school year. Of that total, 2,883 homeless children were in the Redlands Unified School District.*

YouthHope's goal, as stated on its website, "is to take the youth from the street to employment to becoming self-sufficient adults." Many of the youths that YouthHope helps are homeless, or at risk of becoming so, and otherwise often live in desperate conditions of poverty.

YouthHope found, in a survey of 106 youths between July 2009 and July 2010 that 52% were homeless (they were sleeping under bridges, on sidewalks, behind bushes, etc.); 28% had lived or were currently in foster care; 59% had parents who were divorced; 40% had parents who had used drugs or were alcoholics; 37% were high school graduates; and 84% had tried to get off the streets, and were unsuccessful on their own.

Mayer agreed that too many Americans are not aware of the desperation in their midst. "There's a church," she said. "that, when I went to share the problems, and after I left, they talked among themselves, and they said this is not a problem, and they wonder how much money we're making off of this. I don't make a penny, and I dump tons of money into this program to help these kids. And so, people are very, very blind. They want to be in denial."

The problems Mayer addresses have been accentuated by draconian cuts to the state budget. (see EIR, *Oct. 15, 2010).*

Mayer was interviewed by Carl Osgood on Oct. 27.

EIR: You've been working in the area of helping homeless young people for several years, right?

Mayer: I've been working with helping kids on the streets for the last seven years. I have focused more into

Courtesy of YouthHope

There are a reported 22,658 homeless children in California's San Bernardino County; they have fallen through the cracks, and are nearly invisible to most Americans, who do not want to face the reality that a large portion of the next generation is being lost. These two young people were sleeping in a vacant field in Redlands, Calif.

San Bernardino County in the last year. Before that I lived in Yucaipa, but I would take youth and we would go down to Venice Beach, Santa Monica; we'd go up to San Francisco, up to Portland, Ore. and Seattle, Wash., but I decided, instead of running all over the place, we need to be in one place, and that is, to work in one place and actually make a difference to get the kids off the streets.

So, we've become a nonprofit organization, YouthHope, and we have made our home in Redlands to work with kids. And we started off feeding kids a year ago, about 30 kids. We just feed on Tuesdays and Thursdays because I don't have a facility, and I need a place desperately, so I can actually do these kids more justice. At this point, we use a patio of the Methodist Church, which is amazing that they allow us to do that, on Tuesday and Thursday. When we started feeding the kids, we would average about 30. I am now averaging somewhere between 60 and 70.

No Food in the Homes

EIR: So it's doubled in just a year.

Mayer: In one year it has doubled. Part of that is hard times. Part of it is kids having trust in us. But what has opened my eyes so desperately, is when I have been on the streets in the past, the kids would more protect their parents, not let anybody know what's going on. I have four different families, and the kids are actually letting me in the homes, and there's no food in those homes, either. There's no food, and I have had a doctor look at me and tell me this kid is malnourished and he is starving to death. And that's a kid that's living in a home! But the mom volunteers that she can't get a job that's good enough to support her family. She's a single mom, and so she's doing her best, but there's no food in the house, and there's actually three kids that live in that household. We've now split them up, so she only has one of the three kids. She couldn't provide food because she doesn't have the money.

I have another kid and he's 17, and mom and dad cannot get a job, and so they left their apartment and they've moved into their car. But, again, there's three kids, and their car's not big enough for the five of them in the car, and so they've told the oldest, "We can't have you stay with us. We have no room in the car." And so he's on the streets, and so what he does is, he goes back to the last place he knows as home, which is the apartment, and there's a laundry facility there, and he sleeps in the laundry facility to be warm at night. And that's his closest feeling to being at home with his family. He'll meet up with his parents off and on throughout the week, but he can't concentrate to go to school, and that's a problem when these kids are on the streets.

A huge, difficult problem is, if you live in California, if you don't have your birth certificate, you can't get an ID. If you don't have an ID, you can't get your birth certificate. Parents are losing jobs and they're out on the streets, all their papers disappear. And now I've got youth that we can't get their IDs, and if you don't have ID, you can't get your Social Security card, and you cannot get a job or you can't go to school. So, it's a huge problem, growing and growing, that—okay, hang

on to your birth certificate. Hang on to your IDs. But again, when parents are hanging on, and they're hurting and they're struggling, that's just junk that they've got to discard because they don't know what to do with it, and they don't realize it's such a huge problem.

In high school, they're definitely willing to work with us, but trying to get a kid into a trade school or into a some type of college, means you have to have your ID, which means you have to have a birth certificate, which means you have to have your ID.

But the other problem, too, with these kids is, they're living in homes where the families are hanging on to the house but they don't have the food. We don't have bus systems to get the kids to school any longer because of the budget cuts, and so these kids are having to walk six miles at least, if not ten miles. It's a long way. Because I don't have a facility, I'll feed the kids on Thursdays, which means they don't eat Friday, Saturday, Sunday. They have school on Monday, but they've got to walk 6 to 10 miles to get to school to get a free breakfast. But if you haven't eaten for a few days, you don't feel like walking, and so the kids aren't getting to school, which means, now, another day has gone by, unless we can get food to these kids. And it costs a lot of money to feed everybody, and to do this, and I don't have a place where I can keep these kids, and I'm driving hundreds of miles just to get food into people's homes and get kids to school. And I have been purchasing bus passes for the kids, at a cost of $35, and parents don't have that.

So, what I'm seeing is, we're having a huge economic problem because the parents aren't working. They're not eating. The kids are not going to school. They're just sitting around. What's going to happen in five years? These kids graduate. They're out of school, or they're on the streets, but there's nothing for them to do. We can't get them a job, we can't get them job-trained. They can't read and write. It's a huge domino effect, and if we're not careful, I don't know. I don't know where the U.S. is going to end up....

Courtesy of YouthHope

Mayer's YouthHope organization has witnessed a doubling of the number of youth who are homeless and hungry, in the last year. Even children still living in homes are malnourished, with some starving to death; many face life-threatening illnesses with no hope of medical care. This homeless youth is sleeping near an abandoned building.

'I Do a Lot of Begging'

EIR: So your biggest frustrations are food and getting the kids to school. The need is huge. It's obviously much larger than you're able to—

Mayer: Oh yeah. We're now feeding close to 70 kids. We have received two grants, and one grant is from The Children's Fund [of San Bernardino] and it's for $5,000, so it's going to be here shortly. We can use that to purchase five bus passes a month. We get three Stater Brothers grocery cards and three Target gift cards for five months that I can use for food to purchase for the kids. And the other was the John Burton Foundation, and that was to help with our office equipment and that was $15,000. So that was really neat. The rest—really, the community is doing the very best.

We have a lot of business owners helping. My husband works over hours to help support YouthHope. I'm working for free and doing what I'm doing. I don't take a penny. He's out there trying to come up with extra money, because we do sink a lot of our own money into helping the kids. I have a lot of people on board that will help our kids. We have a dentist. We have a doctor. We have eye care. What they are willing to do is, if I call

and say I have a kid that needs help, they will do that for us.

The kids' health has gone down terribly. The last time they were vaccinated was years ago. That costs the parents extra money. So that's another problem. They're not getting their vaccinations that they're asked to do, because it costs them money.

You don't have the dental care. I have kids that show up and their mouths are killing them. They have their wisdom teeth coming up. They have all this pain because the parents are not taking their kids in for dental care. So, we do this for the kids, and we help them, but people are going down, too. They're not getting their physicals. They're not doing the checkups. They're not getting the tooth taken care of. Their teeth are starting to rot out. I have kids that come up and they need glasses. They can't see the bulletin board, or they can't see the chalkboard any more, because they need glasses, and the parents don't have the money to take care of that issue any more. So, their medical needs are huge. I have been fortunate enough to find doctors and dentists to do those services for free for YouthHope, and what they cannot cover, because of private donors, we're hopefully able to take care of that.

Obviously, I need money, because it's just very, very expensive. I do beg. I do a lot of begging, because these are the things we do. I purchase food. I purchase glasses. I purchase medicine. We have a kid—he has extremely high blood pressure at age 17, super-high blood pressure. The doctors can't run tests to see why, because there's no funds to do that, but they do have him on high blood pressure medication. We purchase that for him, because the family doesn't have the money or the resources. And if we don't do that, the kid's going to die!

So, we're struggling and I go around and do a lot of begging. We don't have any extra money whatsoever. I don't have any paid staff whatsoever. Everybody that works with me is completely volunteer. And it's totally out of the goodness of their hearts.

EIR: So, basically all of the stuff that you and I took for granted when we were growing up, is the hardest stuff to get for all these kids.

Mayer: Including their parents being there and showing love, because the parents are struggling so hard, they're not there. They're not there to raise their kids. They're absent parents. If they can find a job that might be paying minimum wage, they're working double hours, and so now you've got the kids raising themselves. I have two kids whose parents, moms—you have tons of single parents—I have two moms, and they're prostitutes trying to make money to live in a house. So, what is that doing to their kids?

America Is in a Huge Hurt

EIR: One of the things is the psychological effect of all this on the kids.

Mayer: They're very, very messed up. It's a huge problem. It just keeps rolling, keeps happening, and that's what people don't look at. Besides the education and the work, you have the physical, you have the mental, and then, along with the mental, you have parents who are very angry and frustrated because they can't get a job. Well, now, I've got abuse because of what's going on. Our abuse rate is extremely high on these kids. Sixty percent of my kids have been abused. The kids on the street? Twenty-one percent of my kids have been sexually abused while they're living on the streets, and so once they get kicked out of the house, or they're trying to pull it together on their own, then they get sexually abused.

EIR: Which is traumatic.

Mayer: It's very traumatic. The parents of my kids and I know it: Because of hurt, that's what parents do. Forty-seven percent of the parents are either alcoholics or drug addicts. And so, they're turning to that, and people say, "Where do they get the money?" The drug dealers and whoever, make it very, very easy, and very, very cheap. So, now the kids, because the parents are hurting so desperately, now they turn to that, and then again, that's what happens to our kids.

America is in a huge hurt. And if it's not you going through it, it's your friend going through it. And the kids sit in school—. As I go and speak to different school districts, youth groups and whatnot, I tell the kids, when you go to class and the kid sitting next to you smells so terrible, it's probably because he hasn't had a bath for a week. It's probably because he's living in his car. It's probably because he's homeless. So, you need to have a different outlook on the kid sitting next to you. It's probably not just because he's lazy and doesn't bathe anymore. It's probably because he cannot get one. And, it is growing.

Heidi Mayer can be contacted through her website, www.youthhope.org

MAURICE ALLAIS (1911-2010)

A Passion for Truth And the Common Good

by Marjorie Mazel Hecht

French thinker Maurice Allais, who died Oct. 9, 2010, is alone among the Nobel Laureates in economics in making the general welfare, and physical reality, central to his economic theories. For this he deserves our thanks. But Professor Allais was more than just an economist; he wrote many books and papers on history, both ancient and modern, and on various political systems. And in physics, he carried out fundamental studies of the anisotropy of space, and his experiments with a paraconical pendulum found evidence of the existence of a new physical force.

For several decades, Allais pursued the question of causality in both economics and experimental physics, with a passion that is notably lacking in both disciplines today. Nothing deterred his quest, and he continued his research and writing into the last year of his long life. Because his work overturned conventional wisdom in both fields, the awards and honors that he won were not without controversy.

Allais received the Nobel Prize in Economics in 1988, when he was 77 years old, for works that he had written four decades earlier: *Á la Recherche d'une discipline Économique—L'Économie pure* (In Quest of an Économic Discipline—Pure Economics), written between 1941 and 1943, and *Économie et Intérêt* (*Economy and Interest*), published in 1947.

His life-long passion for economics, and for improving the human condition, was sparked by his visit to the United States in 1933, after his graduation and before his military service. It was during the depths of the Great Depression, and he was moved by the terrible social conditions. He wanted to know what caused it, and how to avoid it—how the economy should be organized for the common good.

A Working-Class Background

Maurice Félix Charles Allais was born on May 31, 1911, in Paris, to parents owned a small cheese shop. His father died in 1915, as a German prisoner of war during World War I, a fact which, Allais said, deeply marked his youth and his entire life.

Allais pursued a higher education, taking top honors in almost all subjects. From college, he entered the

École Polytechnique in 1931, graduating first in his class two years later from this elite French science school. From there, Allais entered the National Mining Corps (Corps National des Mines), because it was (and still is) from this Corps that France's industrial leaders were drawn. He then completed a year of military service in the Alpine Army, and two years at the National School of Mines (École Nationale Supérieure des Mines) in Paris, beginning work as an engineer in 1936. A year later, when he was only 26, he was in charge of the mines and quarry service in the Nantes region, and also of the general and local railway systems.

At the outbreak of World War II, Allais served briefly again in the Alpine Army on the Italian Front, returning to his mining duties after the French armistice in 1940, working in Nantes, which was then under German occupation. In 1943, he moved to the Bureau of Mines Documentation and Statistics Office in Paris, where he remained until 1948. It was here that he began his economic study and writing, working at least 80 hours per week, and writing the works on which the 1988 Nobel Prize was based. He worked intensively for 30 months during what he called "the darkest years of World War II," the German occupation of France, when his work as a mining official was slow.

An engineer by training, Allais taught himself eco-

In Memoriam: Maurice Allais

by Jacques Cheminade

PARIS, Oct. 11, 2010—I just learned last night of the passing away of Maurice Allais. The only French Nobel Prize laureate in Economic Sciences has left us, without the written press of this morning paying him due homage.

Indeed, for a certain time, *Le Figaro* refused to publish his articles, and only *l'Humanité* (the French Communist Party daily) and, last year, the weekly *Marianne*, had opened their pages to him.

Today, *Le Figaro* is more prolix, but no media mentions that Allais was always a defender of the separation of the activities of investment banks and deposit banks (his vision of the Glass-Steagall law), and that he had explained, demonstrated, and forecast for more than a decade, in numerous books and articles, the world financial catastrophe which occurred during the Summer of 2008.

Logically, Allais became associated with the wide public debate begun by Lyndon LaRouche, in favor of radically refounding the credit system and the international monetary system, underlining that, on essential points, Mr. LaRouche and his organizations had "often supported ideas close to my own proposals for fundamental reform of the international monetary and financial system." In a letter of Nov. 27, 2009, he authorized us to make this statement public (see full letter).

This "liberal socialist," who, to me, was neither one nor the other, but rather an expert in fundamental physics who looked at the economy from the standpoint of equipment and production, and not simply from a monetarist vision, liked to state that only one of his students lived up to that name, Gérard Debreu. Many other leaders and French officials . . . had also followed his classes.

. . .During my early years of study, I was immersed in the spirit which the works of Maurice Allais had inspired in our country.

Let this spirit be reborn, beyond the present disarray and incompetence, and inspire those who are aghast at the dominant financial system, that they find a way to come out of it, from the top-down, not through the issues of a regressive past, but in a future of science and innovation, which is at the heart of what Allais always defended: an economy in which man is responsible for his species and for nature, discovering, applying, equipping, and producing.

There is urgency, an extreme urgency, because a world whose financial system is disintegrating and decomposing, needs a new generation of leaders, in the image of such a person of character as Maurice Allais.

Jacques Cheminade is the Presidential candidate of the Solidarity and Progress party (Solidarité et Progrès) in France, and an associate of Lyndon LaRouche.

nomics, studying all the economics books he could find at the time. Throughout his life, he advised his students to follow the guideline by which he worked: "Read the great thinkers in their original works."

Most impressive, in his own estimation (and that of other French observers), is that Allais managed not only to write a 1,000-page tome (*In Quest of an Economic Discipline*), but also to *publish* it at a time when paper was in extremely short supply. As one of his students put it, that was a real economic miracle!

Allais characterized himself at the time as an "amateur," but, as he stated in his 1988 Nobel lecture, "amateurs possess one very exceptional advantage, that of never having been conditioned by university training and the constant repetition of established truths, and, therefore, of being able to examine every question with a fresh eye, without any preconception and prejudice." Indeed, Allais characterized how he felt about his first economics work, by quoting from a letter by Gottfried Leibniz: "I wished to swim by myself, without any master. . . . Frequently, in the light of a few lines encountered in my reading, I drew the substance of countless meditations."

Allais began his work in economics by looking for a solution to what he called the fundamental problem of any economy, namely how to promote the greatest feasible economic efficiency while ensuring a distribution of income that would be generally acceptable. In the days of wartime occupied France, when he began his economic studies, he considered how best to organize postwar France, developing the foundations on which an economic and social policy could be validly built. Over the years, he continued to elaborate ways in which the economy would run smoothly, without income inequity.

Reality First

After 1948, Allais left administrative work to concentrate on teaching, research, and writing. He was a professor of economic analysis at the École Nationale Superieure des Mines, a research director at the National Center for Scientific Research (Centre National de la Recherche Scientifique), and he held teaching positions at several other institutions. Although he retired from civil service in 1980, Allais continued his work—teaching, researching, writing, and winning many prestigious awards for both his economic and scientific work.

Throughout his many books and articles, Allais reiterated his philosophy of science and economics, stressing three main points:

1. The elaboration of theories and models in which creative intuition must play the determining role, and which must be in agreement with reality;

2. The use of mathematics as a tool, not as an end in itself. Allais emphasized the abuse of mathematical formalism in economics and elsewhere;

3. The necessity for constant questioning of established truths, which, he said, often tyrannically outlaw new ideas, even when these are more in agreement with reality than the established view. "Science is perpetually growing, always sweeping out established truths," he wrote. "It is the future which is the final judge of the works of man."

Attacking the 'Casino Mondiale'

Although Allais wrote in 1989 that he was more concerned with understanding what men do, than with convincing them, nevertheless, he campaigned in the news media to influence public policy. In the late 1980s, as the world economy disintegrated, Allais took his views to the French public with a series of commentaries in the leading newspapers condemning the *casino mondiale* (world casino), the shift in the world economy away from production of real goods and into pure financial speculation, and warning of a crash to come, unless changes were made. In the early 1990s, Allais added a detailed attack on globalization to his critique of the existing national and world monetary systems.

In this effort, he joined economist Lyndon LaRouche on more than one occasion in calling for fundamental reform of the international monetary system. In a 2008 public statement, he wrote: "Mr. Lyndon LaRouche and his organizations have frequently supported ideas near to my own proposals for fundamental reforms of the international financial and monetary systems, which I have publicly backed for many decades."

Speculation vs. Physical Economy

The clearest way to understand Allais' economic concepts is to see how he applied them to the financial crisis that erupted in October 1987. In a series of polemical articles in the popular press, Allais argued against financial speculation, for tighter government regulation, and for investment in the national physical economy to spur growth. In a front-page article in the national daily *Le Monde,* on June 27, 1989, titled "From Crash to Euphoria: The Plague of Credit," Allais wrote:

My key conclusions are that, just as in 1987, in

Henry Aujard

Maurice Allais' state funeral Oct. 16, 2010, at the Cathédrale Saint-Louis des Invalides.

fundamental terms, the world economy is potentially unstable; that its short-term evolution is essentially unpredictable; and that in order to do away with that potential instability, the international financial and monetary institutions ought to be thoroughly reformed.

The whole world economy rests upon gigantic debt pyramids that mutually sustain one another in a precarious balance. Never in past history had there been such an accumulation of promissory notes. Never had it been so difficult to honor such promises.

Whether it is currency or stock speculation, the world has become one vast casino where gambling tables are spread over all meridians and latitudes.... Speculation everywhere is boosted by credit-issuance, since one can buy without paying and sell without owning.... All our difficulties stem from ignoring the fundamental reality, that no [market system] may properly operate if uncontrolled credit creation of means of payment *ex nihilo* allows (at least temporarily) an escape from necessary adjustments.

In an Aug. 27, 1992 interview with the Spanish newspaper *El País,* Allais stated:

The Western stock exchanges are nothing but complete manipulation. It's a game, taking positions, and then playing not at forecasting events, but playing at divination, what others may think of those events. There is one image which illustrates the problem: people living and working beside Mount Aetna. No one knows when the next eruption will occur. We are in the same situation today.

Allais continued to polemicize against the major trends in the world economy in the 1990s: globalization and free trade. Writing in the daily *Le Figaro* on Nov. 15-16, 1993, Allais roundly criticized the study by the World Bank and the Organization for Economic Cooperation and Development (OECD), "Trade Liberalization: Global Economic Implications." He specifically defended agricultural subsidies against attack, again stressing the reality of the physical economy as opposed to monetary speculation based on credit *ex nihilo.* He showed that French agricultural subsidies, in real terms, represented only three one-thousandths of a percent (.003%) of the GDP of France. He concluded that the World Bank/OECD conclusions were exaggerated by a factor of between 100% and 1,000%! Allais wrote:

I want to warn against the conclusions of this study, which are based on a highly controversial model of world trade, above all on an incorrect estimation of the gains possible from global free trade....

How do we correctly evaluate the order of magnitude of real costs of agricultural subsidies? We must distinguish between the volume of subsidies and the real cost to the economy, because the subsidies go to create real physical income to the economy. The proper evaluation of this real cost of subsidies is one of the most difficult questions of economic analysis....

The World Bank and OECD bear much of the responsibility for the drive for trade liberalization. The World Bank prediction of enormous "gains" to the world economy is intended to influ-

ence political policy, using the mask of pseudo-science, which can only fool the naive. To make decisions which have great consequences for many tens of millions of people in the world based on such conclusions, would be ludicrous. The World Bank report is a gigantic mystification on behalf of a simplistic ideology, the ideology of dogmatic and uncontrolled free trade.

Through the 1990s, Allais continued to criticize the dogma of free trade, globalization, floating exchange rates, and the deregulation of the financial markets. He warned that these policies were destroying national economies, engendering unemployment and instability, de-industrializing, and reducing the rate of growth of living standards. He was especially critical of the European Union's policy toward China, forcing it into low-value-added activities. Similarly, he criticized EU policies toward the former Soviet states.

Allais wrote a paper in 1991 (revised in 1992), putting forward a solution to the devolution of the world economy, titled "The Monetary Conditions of an Economy of Markets: From the Teachings of the Past to the Reforms of Tomorrow." In the face of the unstable situation, Allais concluded that "the basic principles upon which the present monetary and financial system rests, on the national and the international level, have to be entirely thought out anew."

Principles of Reform

Allais laid out two basic principles for the necessary reform, which would prevent the creation of money from nothing:

> The realm of monetary creation must pertain to the State, and the State only. The Central Bank must therefore be given the total mastery of the money supply.
>
> Monetary creation other than that of the monetary base by the Central Bank must be made impossible, so as to prevent any one other than the State from enjoying the fictitious claims that currently stem from the creation of bank money.

Allais described the *ex nihilo* creation of money by the banking system as identical to the creation of money by "counterfeiters," the only difference being that those who profit are different. He proposed, therefore, that although all banks would be private, except for the Central Bank, all income derived by the Central Bank's creation of money should be returned to the State, enabling the latter, under present circumstances, to do away with practically the whole of the progressive tax on income.

EIRNS

Maurice Allais and his wife, Jacqueline, at a 2001 seminar in the Paris office of Solidarité et Progrès. Mrs. Allais died in 2003.

This would eliminate the present circumstance where profits and their beneficiaries are not transparent. Such revenues, he wrote, "merely generate inflation, and by encouraging investments that are not really profitable for the community, they only generate a wastage of capital."

Allais also proposed measures to fundamentally reduce uncertainty concerning the future, by indexation—for example, linking of wages to prices—that would maintain efficiency in the economy and equity in the distribution of income.

Thatcher's New Versailles

In the 1980s and 1990s, Allais penned several articles on contemporary political issues. He defended German Chancellor Helmut Kohl's decision to unify Germany in 1989, and sharply criticized British Prime Minister Margaret Thatcher's opposition to this unification as being in the 19th-Century tradition of Britain's "divide and conquer" strategy. In the March 12, 1990, *Le Figaro,* Allais wrote:

> The efforts of all those now who, directly or indirectly, stand in opposition to the reunification

of Germany and its implications, are fundamentally identical to the efforts deployed after the First World War to reach the Treaty of Versailles, efforts which led in the end to the Second World War. We must choose: Either we create a situation which risks leading us, sooner or later, to a third world war, or we participate, loyally and without second thoughts, in the integration of a reunified Germany in a united Europe.

Allais opposed the war in Iraq launched by U.S. President George H.W. Bush, as well as the role of U.S. "coalition" partners in the Mideast. Writing in *Le Figaro Magazine,* on July 23, 1991, Allais said in respect to the Gulf War:

> Without question, since the collapse of the Berlin Wall, on November 9, 1989, a new era of the history of the world had begun. The world today must be reformed and a new international order is necessary. However, this international order should not be based on the oppression and humiliation of some and the insolent domination of others. The new international order that we strongly feel we need, must be based on equity and on justice, on an equal respect for all peoples, not proclaimed on by-ways in solemn declarations, but practiced in concrete realities each day. It must be founded on ethical principles that are at the basis of our humanist civilization.

Worldwide recognition of Allais's pioneering work in economic theory came late in his career, partly because his works were not translated from French, and, more so because he trampled on accepted academic economic dogma. Allais's promotion of State intervention in many areas, and his idea that economics should further the general welfare, especially offended economists of the Austrian School. But popular acclaim was not his goal. As he commented in the conclusion to his 1988 Nobel lecture:

> *Whatever the price he might pay for it in his career,* the scientist should never steer his course according to the fashions of the day, or the approval or disapproval of his contemporaries. His sole concern must be with the quest for truth. This is a principle from which I have never departed (emphasis in original).

The Scientific Work of Maurice Allais

Identifying a New Physical Field

by Laurence Hecht

Oct. 24—Maurice Allais' physical researches are often viewed as a counter-position to Einstein's relativity theory. Professor Allais indeed presented compelling evidence that the speed of light is not independent of its direction, and that therefore this precept, which is at the foundation of the special and general theory of relativity, renders the theory invalid. That shocking possibility much intrigued me in 1998, when I first learned of the work of this French genius whom I later came to know both as a friend and a source of scientific inspiration. I shall touch only briefly on that aspect of Allais's work here, rather emphasizing his own experimental researches with the pendulum, leading to the identification of a new physical field, which I believe constitutes the most important of his contributions to science.

As Einstein's unique formulation of the relativity of space-time subsumed the existing laws of mechanics in a new and more comprehensive framework, it would only be the discovery of new physical phenomena that could fundamentally undermine this conception. Einstein's 1921 visit to American physicist Dayton C. Miller, and his later published comments on the Mount Wilson experiments, indicated his openness to this possibility. Miller, who had taught at the Case School of Applied Science in Cleveland with Albert Michelson's collaborator, the chemist Edward Morley, was then attempting to demonstrate with an improved apparatus that the Michelson-Morley experiment had not produced a null result, but rather one which was in accord neither with the assumption of Einstein that there was no ether—that is, a medium through which light and other electromagnetic waves propagated—nor with the older view of a stationary ether. Einstein encouraged Miller, noting that if the experimental results should prove him wrong, a new theory would be required. That exchange, and Miller's experiments, played an important part in Allais' think-

ing. However, that is not the best way to introduce the reader to the significance of his work.

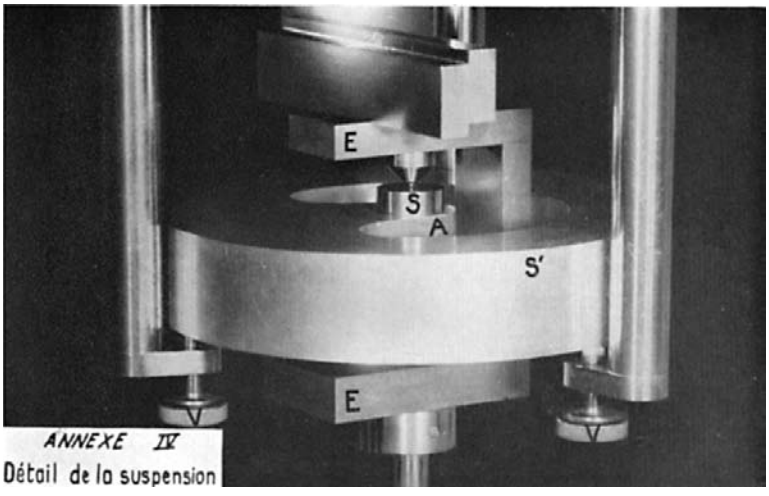
The Paraconical Pendulum

Let us rather go directly to certain experiments with a unique sort of pendulum, conceived in 1953 and carried out by Professor Allais and assistants from 1954 to 1960 in a laboratory in Saint-Germain, and during part of one year simultaneously in a quarry at Bougival, some kilometers distant. The idea for these experiments had come from Allais' conviction that the propagation of the gravitational and electromagnetic actions requires the existence of an intermediate medium. It would not be precisely the ether as conceived by Augustin Fresnel early in the 19th Century, but a modification of it, for this ether could not be motionless in relation to the fixed stars, as had earlier been assumed. A magnetic field, whose geometric expression in the form of a whirl is easily demonstrable, would then correspond to a local rotation within this presumed medium, or ether, in Allais' view. And from this thought came his idea for an experiment that could establish a never before observed link between magnetism and gravitation. If the magnetic field represents a local disturbance within the ether, it should produce some subtle effect upon the motion of a non-magnetic body, falling, as does a pendulum, under the influence of gravitation through that magnetic field.

Allais began in 1952 with observations of a glass ball suspended on a thread about 2 meters long, but with no magnetic field other than that of the Earth. "To my great surprise, I found out that this movement did not reduce itself to the Foucault effect, but displayed very significant anomalies in relation to this effect," Allais wrote in an autobiographical essay completed in 1988, the year he won the Nobel Prize in Economic Science.[1]

In 1861, Léon Foucault had famously demonstrated that a long pendulum, mounted so that it was free to swing in any vertical plane, would gradually change the azimuth of its plane of oscillation, turning through a full circle to return to the starting position after a length of time which depends upon the geographic latitude. At the installation in Paris where Foucault first demonstrated the effect, the pendulum took about 32 hours to return to the starting azimuth, while at either of the poles it would take just 24 hours. Foucault had found a means to demonstrate the rotation of the Earth from a point upon the Earth. It was an astounding demonstration, followed a year later by use of a gyroscope to show the same. However, as Allais lamented, despite the installation of Foucault pendulums at many universities and public buildings around the world, no study of the finer motion of the pendulum had ever been conducted over an extended time period.

FIGURE 1



Experiments with the glass ball pendulum in magnetic fields of a few hundred gauss did not provide definitive answers to his original hypothesis, and, unable to obtain a device for producing more powerful magnetic fields, Allais turned to a study of the anomalies in the motion of a short pendulum. For this purpose, he constructed a device which he called a paraconical pendulum, suspended such that the full weight of the pendulum rod and bob rested upon a small steel ball. A precision ball bearing resting upon a plane surface provided a very sensitive low-friction apparatus, which allowed the pendulum to swing to and fro in any figure, and to change azimuth in response to whatever forces might drive it. The means of realizing this can be seen in the photographs of the Allais pendulum. **Figure 1** shows the detail of the suspension. The

1. "My Life Philosophy," *American Economist*, Vol. 333, No. 2 (Fall 1989) as excerpted in *21st Century Science & Technology* (Spring 1998), pp. 32-33, available at http://allais.maurice.free.fr/English/media13-1.htm

weight of the pendulum rests upon a small ball bearing which is held within the removable bearing surface S, made from aluminum. The pendulum weight, rod, and stirrup (E) are made from bronze weighing a total of 12 kg. The horseshoe-shaped cutout in the large aluminum disk S′ (labeled A) allows a rotation of the azimuth of the pendulum of just over two right angles.[2]

The experiment was conducted by allowing the pendulum to swing freely for a 14-minute period every 20 minutes. The azimuth attained was determined by a graduated measuring circle capable of attaining an accuracy of 0.1 centesimal degrees (**Figure 2**). (There are 100 centesimal degrees in a right angle and 400 in a circle.) On each re-launching, the ball bearing was replaced with a new one, and the azimuth attained on the previous trial was used as the starting azimuth. The bearing surface was changed at the start of each week. These observations were carried out continuously day and night for periods up to a month during June and July 1955. Three years later, simultaneous experiments at two locations established the same results.

Because of an asymmetry or anisotropy in the modulus of elasticity of the upper support, S′′, there was a preferred azimuth to which the pendulum might tend to return, barring other effects. (The direction is indicated by the arrow PQ in **Figures 3 and 4**.) As a result, the pendulum did not rotate through a full 360°, like the Foucault pendulum, but rather varied its azimuth over a range of about 100 centesimal degrees (one-quarter circle). It was the periodicity of the variations in azimuth which proved to be most interesting. After discounting for the Foucault effect and the "return effect" due to the anisotropy of the support, Allais found very strong evidence for a periodic effect, which could not be attributed to any known cause. Harmonic analysis by a mathematical technique known as a Buys-Ballot filter showed that

FIGURE 2

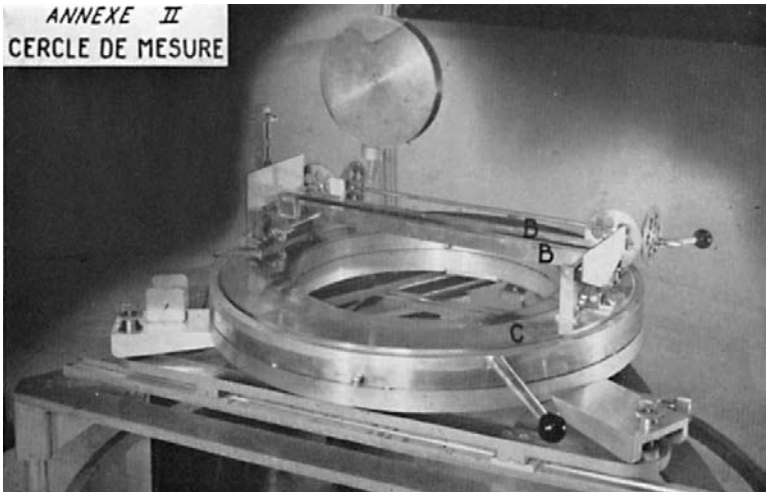


FIGURE 3

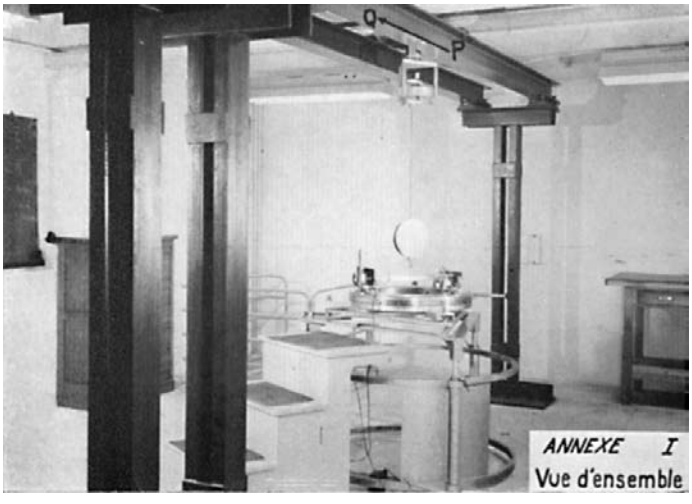
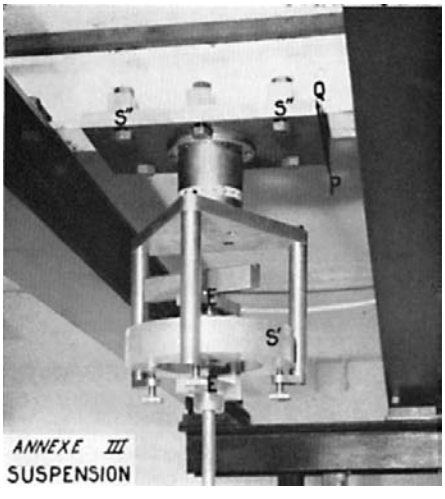


FIGURE 4



2. See Maurice Allais, "Should the Laws of Gravitation Be Reconsidered" (1959) reprinted in *21st Century Science & Technology* (Fall 1998), pp. 21-33. An electronic copy of that reprint is at http://allais.maurice.free.fr/English/media10-1.htm. The paper was originally published in English by the American Institute of the Aeronautical Sciences at the recommendation of Wernher von Braun. It appeared in *Aero/Space Engineering*, Vol. 18, Nos. 9 and 10 (September and October 1959).

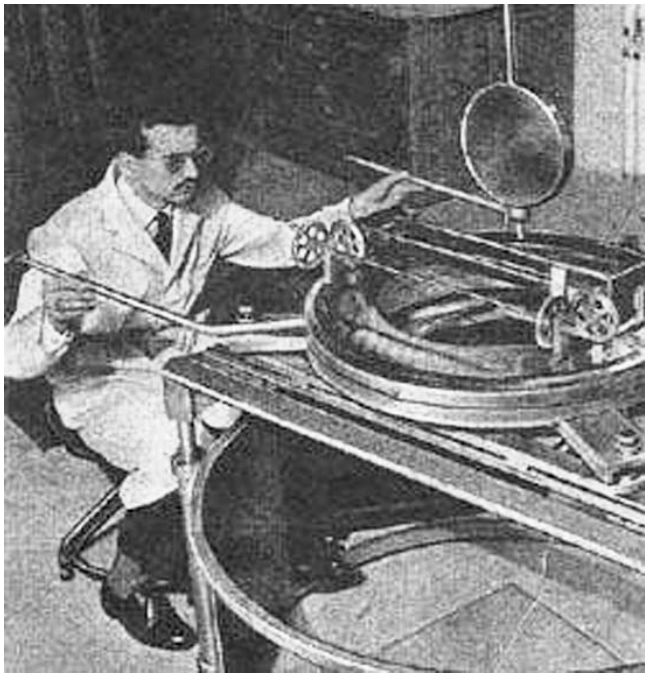
the periodicity manifested itself on a cycle of 24 and 25 hours. Analysis showed that the unknown disturbing influence or influences giving rise to this periodicity was of a strong character, with a strength on average and as a whole about twice that of the Foucault effect.

Luni-Solar Influence?

The rising of the Moon occurs later each day, by an amount varying from about 20 to 80 minutes and averaging about 50 minutes over the course of a month. Thus, the position of the Moon overhead obeys a cycle of about 24 hours 50 minutes. This fact might lead one to suspect that the observed cyclicity in the pendulum data is due to the gravitational effect of the Moon, or the combined effect of Moon and Sun. The behavior of the pendulum during a total eclipse of the Sun on June 30, 1954 gave added reason to suspect a gravitational influence linked to the luni-solar alignment. A sudden variation in the azimuth of the pendulum of a magnitude never observed in any other continuous observation period took place at the start of the eclipse. Similar anomalous behavior of a pendulum during solar eclipses has since been observed by others.

However, an analysis by Allais showed that the difference in gravitational attraction exerted by the luni-solar alignment upon a point on the Earth could not give rise to such variations in the pendulum, for the order of magnitude of such effect is 100 million times smaller than the gravitational field that drives the pendulum's fall. The difference between the attraction of the Sun and Moon upon the center of the Earth, as compared to a point on the Earth's surface, is of the order of 10^{-8}, a value of such insignificance that none of the 19th-Century authors who worked on the theory of the pendulum ever took it into consideration. In addition, for the change in luni-solar force to affect the azimuth of the pendulum, one must take into account the difference between the attraction at the mean position of the pendulum and its magnitude at a nearby point, a difference in force of a tiny order of magnitude, equal to 10^{13} that of the pull of gravity at the Earth's surface.

Thus, neither the regular cyclical variation of the pendulum, nor the anomalous behavior at the time of solar eclipse, can be explained by the presently understood theory of gravitation. Something else is at work.



Jacques Bourgeot, laboratory director, operating the Allais paraconical pendulum, photographed by Maurice Allais. He is operating the measuring circle for the pendulum, which allows measurement of the direction of the swing and the two axes of the flat ellipse which the pendulum bog traces out.

Other Possible Causes

In order to arrive at an explanation, Allais considered a wide range of known periodic phenomena, including the terrestrial tides, variations in the intensity of gravity, thermal or barometric effects, magnetic variations, microseismic effects, cosmic rays, and the periodic character of human activity. Yet, on close examination, the very peculiar nature of the periodicity shown by the change in azimuth of the pendulum forced the elimination of all of these as cause. For the pendulum, the amplitude of the 25-hour wave was of the same order of magnitude as that of the 24-hour wave, and very much greater than the amplitude of the 12 and 12.5-hour wave. Yet for all of the phenomena considered as possible causes, the total of the amplitudes of the waves having periods close to 25 hours is small as compared to the 24-, 12-, or 12.5-hour series.

By the elimination of such causes, Allais was led to his hypothesis of spatial anisotropy which I first learned of on reading a review of his 1997 book, *L'anisotropie de l'espace* (*The Anisotropy of Space*). On closer examination of this work, I discovered the existence of many little-known anomalous phenom-

ena, which he supposed to be evidence of a dissymmetry or anisotropy of space. Among these were the measurements carried out by Ernest Esclangon in the 1920s, when he was the director of the Strasbourg Observatory. These involved certain systematic shifts that occurred in the sighting of a refracting telescope, depending on whether the instrument was aimed toward the northwest or northeast, and showing a periodicity which coincided with the sidereal, but not the mean, solar day. Prior to this, Esclangon had made an analysis of 166,500 hourly observations of the Adriatic tides, which he interpreted as demonstrating a dissymmetry in the sidereal space, not affected by the luni-solar alignment.

Allais believed that the variations noted by Esclangon were closely related both to the results of Dayton Miller's extended observations at Mount Wilson with the upgraded Morley-Miller interferometer,[3] and to his own results from the paraconical pendulum. Indeed, Allais suspected that a wide variety of anomalous periodic behaviors might also be comprehended by this conception of spatial anisotropy. It is instructive to reproduce the list of such effects, which he included in his 1959 paper, "Should the Laws of Gravitation be Reconsidered?":

1. Abnormalities in the tide theory;
2. Motions of the top of the Eiffel Tower;
3. Size of the deviations to the South noted on falling bodies;
4. Variations in the amplitude of the deviations to the east noted on falling bodies;
5. Abnormalities noted in the action of terrestrial rotation on the flow of liquids (Tumlirz's experiments);
6. Abnormalities noted in the motion of the horizontal gyroscope of Föppl;
7. Abnormalities noted in the experiments carried out with the isotomeograph;
8. Abnormalities noted in experiments carried out with a suspended pulley;
9. Various abnormalities noted in geophysical measurements, ascribed until now to experimental errors;
10. The apparently unaccountable results obtained by Louis Pasteur (a general in the French Medical Corps, not the 19th-Century scientist) in his experiments on the oscillation of the pendulum (1954);
11. Remarkable characteristics of the Solar System, for which there has been, until now, no satisfactory explanation.

To these considerations, we would like to add one other case of an unexplained periodicity corresponding to the solar and lunar day, as well as to longer cycles, which came to our attention only recently. The nature of it is such as to lend an added breadth to the considerations raised so far. These are the periodicities in metabolic activity observed in organisms as diverse as crabs, salamanders, potatoes, seaweed, and carrots, as reported some decades ago by Northwestern University biologist Frank A. Brown and colleagues.[4] In one especially provocative series of experiments, Brown and collaborators observed the cycle of shell opening and closing in oysters that had been transported in a photographic dark box from New Haven, Conn. to Evanston, Ill. Maintained under conditions of artificial light, pressure, and temperature, the bivalves nonetheless gradually changed their time of opening to correspond with high tide as it would have occurred in their new, landlocked location.[5] How they received the time signal remains a mystery. Brown later found an inverse correlation of the metabolic activity of these and other organisms to the intensity of cosmic ray flux.

The similarities and differences of these observations of cyclical activity exhibited by living organisms, compared to those of a purely physical nature noted by Allais, are worth closer study. As the experiments of Allais and Brown occurred within the same epoch, some very precise comparison of data may be possible.

I am reminded of a meeting in Paris in the Spring of 2001 at the offices of the political movement associated with Jacques Cheminade. That was one of two occasions on which I had the pleasure to meet Maurice

3. Maurice Allais, "The Experiments of Dayton C. Miller (1925-1926) and the Theory of Relativity," *21st Century Science & Technology* (Spring 1998), pp. 26-34, available at http://allais.maurice.free.fr/English/media12-1.htm, and the accompanying background piece, Laurence Hecht, "Optical Theory in the 19th Century and the Truth about Michelson-Morley-Miller," *21st Century Science & Technology* (Spring 1998), pp. 35-50.

4. See, for example, Frank A. Brown, Jr., M.F. Bennett, and H.M. Webb, "Monthly Cycles in an Organism in Constant Conditions during 1956 and 1957." *Proceedings of the National Academy of Sciences*, Vol. 44 (1958), pp. 290-296.

5. Frank A. Brown, Jr., M.F. Bennett, H.M. Webb, and C.L. Ralph, "Persistent Daily, Monthly, and 27-Day Cycles of Activity in the Oyster and Quahog," *J. Exp. Zool.*, Vol 131, No. 2 (March 1956), pp. 235-262.

Henry Aujard

Maurice Allais (right) in Paris in 2001, with (left to right) his wife, Jacqueline, Laurence Hecht, Emmanuel Grenier, and Marjorie Mazel Hecht.

Allais. Also in attendance were the biophysicist Vladimir Voeikov, Allais' associate Henry Aujard, Remi Saumont of the CNRS (National Center for Scientific Research), and others. I recall the enthusiasm with which Allais responded to the suggestion that an international organization be created to carry out investigation along the lines similar to those I have outlined here. That proposal did not take off at the time. Now, however, in a new generation of thinkers associated with Lyndon LaRouche's Basement Project, it has taken shape.

Beyond Sense Certainty

What is most intriguing about the new physical field, of which Allais' experiments give evidence, is the suggestion of an effect not clearly linked to visible objects, nor to any sensible phenomenon of which we are presently aware, even including cosmic rays as presently understood. The introduction of the sort of considerations epitomized in F.A. Brown's works, allows us to more easily view the matter from the standpoint of a universal field not limited to physical effects, in the strict sense, but acting upon the three domains of living, non-living, and cognitive as identified by V.I. Vernadsky.

Here I raise a point of difference with Allais in his formulation of an anisotropy of space, my objection being not so much to the anisotropy, but to the space. There is no empty space; on this point we would not have differed. However, I believe one must go beyond filling the apparent distance between the objects of naive sense certainty with a medium, of whatever composition. Rather than space, time, and matter, we might better say a universal continuum with singularities, borrowing these, actually imprecise, terms from mathematics, for lack of a better image. Thus, the radiation-filled interstellar space is not truly distinct from the objects which appear to fill it, and from this flows the necessity of the next revolution in our scientific understanding, to reconstruct the Periodic Table of Dmitri Mendeleyev from the standpoint, not of particles, but of a universal cosmic radiation or field. I believe that Allais and myself would have found common ground, if not perfect agreement, on this approach, had we had the opportunity for extended discussion of the matter.

Immortality exists as a real and even measurable phenomenon, far more than most today are willing to recognize; the greater the soul, the more manifest. Herein spiritual greatness is distinguished from the common sort of passing fame, which is never won without moral compromise. For such unfortunate cases, in the end, after all the ceremony and intoning of empty words is over, there is little left. It is quite the opposite with great souls, who leave behind a legacy of thought and action from which the living still wish to learn and with which they still desire to consult. In the renewed dialogue I here initiate with my dear friend Maurice Allais, that elementary truth is about to be proven once more.

Editorial

Countdown to a New Dark Age

It should be clear that nothing has been resolved by the outcome of the midterm elections, just passed. The world stands at the brink of chaos and a New Dark Age, unless the British Empire's economic policies, which President Barack Obama represents, are immediately dumped, and replaced with the policies promoted by Lyndon LaRouche.

To get an idea of the price we will pay if Obama and his policies are not removed from the Presidency, look at the microcosm that is Haiti. Recall the scenes being reported, including by an eyewitness in the town of St. Marc, in the wake of the cholera epidemic that broke out a mere two weeks ago:

"I had to fight my way through the gate as a huge crowd of worried relatives stood outside, while others screamed for access as they carried dying relatives into the compound. The courtyard was lined with patients hooked up to intravenous (IV) drips. It had just rained and there were people lying on the ground on soggy sheets, half-soaked with feces. Some children were screaming and writhing in agony, others were motionless with their eyes rolled back into their heads as doctors and nursing staff searched desperately for a vein to give them an IV. The hospital was overwhelmed, apparently caught out suddenly by one of the fastest killers there is."

One is powerfully reminded of scenes from Boccaccio's *Decameron*, about how the Black Death ravaged Florence, Italy, in 1348, or the famous chronicle of the time by Agnolo di Tura, of Siena:

"The victims died almost immediately. They would swell beneath the armpits and in the groin, and fall over while talking. Father abandoned child, wife husband, one brother another; for this illness seemed to strike through breath and sight. And so they died. None could be found to bury the dead for money or friendship. Members of a household brought their dead to a ditch as best they could, without priest, without divine offices.... I, Agnolo di Tura ... buried my five children with my own hands.... And so many died that all believed it was the end of the world."

The tragedy in Haiti is *not* what is happening to the Haitian people—that is merely an unnecessary horror and crime. The true tragedy is that what is now happening was "foreseeable, and foreseen," as Lyndon LaRouche put it, and yet virtually nothing has been done to stop it. The tragedy is that LaRouche warned you, and all of our fellow citizens, that Barack Obama's policies would mean the death of Haiti, unless he were stopped.

LaRouche warned back in February, following the earthquake that struck the island, when he outlined a precise plan for mass relocation of Haitians out of the cesspools of Port au Prince, that a new holocaust would hit, if Obama, who had rejected the plan, were not removed. How many Haitians have to die before Obama is impeached?, he asked.

Yet our nation has watched, as all of Obama's policies, one by one, have been implemented; and we have watched as, one by one, they have each produced *exactly* the genocidal results LaRouche warned would be the case—emphatically including his hyperinflationary defense of the British imperial financial system.

And Obama remains in the White House—although the pressure to remove him grows by the day.

Remind yourself, and others, of what's at stake, by revisiting LPAC's 2009 video feature, "The New Dark Age." And then turn to LaRouche's Nov. 6 webcast to find out how to *act* to prevent that global tragedy from playing out.