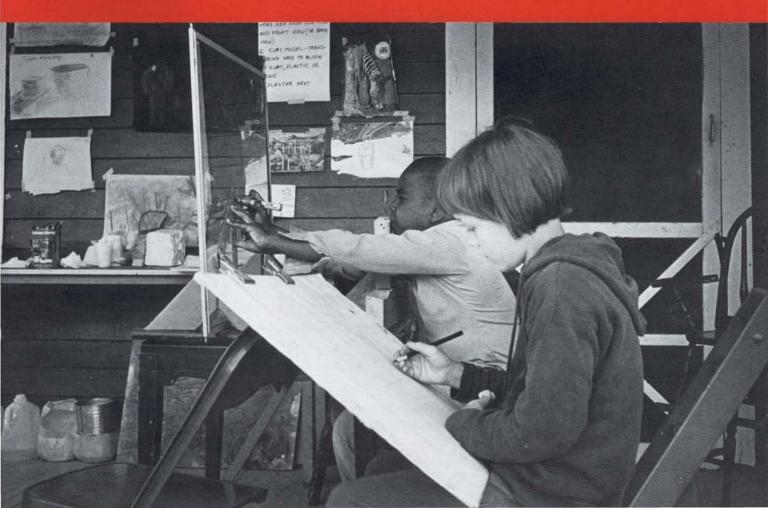


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From the Editor

Education is perhaps the issue most on Americans' minds in the 1988 election campaign, and the one candidate who is prepared to discuss this issue in depth is Lyndon LaRouche, whose two-part series on curriculum begins on page 34. You may wonder how these ideas would translate into practice in the classroom, and for that, I recommend the excerpts from the give-and-take between Mr. LaRouche and 500 high schools students in New Hampshire, which appears on page 63.

The second hottest item this week comes from the other side of the wall, the exorbitant ravings of the Soviet "cultural" paper, Literaturnaya Gazeta, against both Mr. LaRouche and his wife Helga Zepp-LaRouche, showing that Moscow takes very, very seriously the candidate that dishonest U.S. polling outfits were trying to eliminate from the New Hampshire primary race on the eve of the election there Feb. 16. Turn to page 46 for a sample of this new targeting of the LaRouches, which we run contiguous to editor-in-chief Criton

Zoakos's analysis of how the military is being called in to run the Soviet economy as a whole.

Then, on page 50, we have an exclusive on the Thai-Lao border war: exclusive to *EIR* only because other print media in the West do not choose to reveal what the Soviet empire is pulling off in that neck of the woods. It might upset the peace-loving image of Secretary Gorbachov.

Finally, on page 60, Webster Tarpley has a battlefront report from Washington on the moves that could sink the INF treaty, and the kind of information that needs to be circulated to move more senators off the fence and into the anti-INF camp. Continuing a series of European contributions to the debate is an article on page 66 by retired Brig. Gen. Friedrich Grunewald of the Federal Republic of Germany, which contains some of the clearest reasons why the treaty leaves Europe vulnerable to Soviet takeover. The last issue of EIR contained another extremely pertinent contribution to the understanding of current Soviet policy, by Gen. Paul-Albert Scherer (ret.), formerly of West German military intelligence. Since so many European governments are "toeing the line" on the INF—convinced that the United States is in fact abandoning them—the circulation of these writings to all relevant officials, and especially to U.S. senators, is crucial.

Nora Hanerman

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EXECONOMICS

Reagan's last budget leaked: The numbers are ridiculous

by Chris White

The outlines of the Reagan administration's proposed budget for fiscal year 1989 have been leaked to the press. Whether the leak, which went to the *New York Times*, represents the final form the package will take, when presented to Congress on Feb. 18, or whether it is intended to elicit feedback to modify the final presentation, doesn't really matter.

The outline of the \$1.1 trillion spending package for the fiscal year which opens Oct. 1 contains enough lies and ideological bug-a-boos to ensure not only acrimonious disputes with Congress over the next months, but also increasingly deadly disputes with the United States' foreign creditors.

The package is premised on a budget deficit for the next fiscal year of \$129.5 billion, down from what the administration still insists will be an approximate \$150 billion deficit for the current 1988 fiscal year. That's where the foreign creditors are going to get increasingly upset.

This year's deficit won't be anywhere near \$150 billion. Start counting from \$250 billion and up. And as for next year, the leaked budget numbers are just ridiculous.

This year's deficit will ultimately be swollen by the accumlated consequences of the October 1987 stock market crash, and its effect on the incomes corporations and individuals report for the year that ended Dec. 31, 1987. Next year's will be swollen further by the foreseeable consequences of the next phase of that collapse. Already, as far as fiscal 1988 is concerned, the deficit is running 25% higher than it was for the comparable three-month period in fiscal 1987.

Now the IRS is beginning to report where things stand from the revenue side. Tax filings since the beginning of the year are down 17.5% from the number of returns filed for the same period in the year before, and refunds are up 20%. The level of refunds indicates that extra witholdings gave the

government interest-free use of tax-payers' money last year, as part of the effort to keep the deficit looking low. It's a trick they won't be able to pull again.

So, the projected deficit will be way off, and the projected revenues will also be way off. Probably the outgoing administration actually believes that by putting together such a package, in this, an election year, the real financial and economic problems that have been aggravated into chronic crises by obsessional "budget-balancing through spending cuts" lunacies will be pushed off into next year, for the next President to deal with.

There have been noises from the Congress that some Democrats, who favor accepting administration deficit estimates, rather than the \$30-40 billion higher figures from the Congressional Budget Office, would go along. Their view, as reported, is that there would therefore be less to cut in an election year.

Whether such intentions are actualized, or not, the fakery about the deficit, and the foreseeable further collapse of revenues, which will begin to show its real size between now and May, is almost a guarantee of renewed problems for the dollar within the same time-frame. It will become clear that the U.S. budget deficit is not under control, and that the touted reduction in the trade deficit will not make much difference, because, under present policies, more foreign funds will be needed, and those foreign funds will generate an outflow in the form of interest payments.

The rest of the package ensures an almighty blow-up, too. For it is proposed to eliminate whole chunks of government social programs, cut defense, and hand over other chunks of government activity to so-called private interests.

Among the programs which are slated for elimination are: "the rural housing insurance fund, the Economic Devel-

opment Administration, urban mass transit discretionary grants, sewage treatment, housing development action grants, the housing rehabilitation loan program, and the economic development programs of the Tennessee Valley Authority."

Among the programs which are to be privatized are: "the complete privatization of waste water treatment plant construction, defense employee housing, certain mass transit projects," and other federal programs. Plus, the President says: "I am proposing the sale not only of the Naval Petroleum Reserves, but also the Alaska Power Administration, the government's helium program," and he is "studying the possible privatization of our uranium enrichment facilities." Beyond this there is said to be a proposal in the works on how to hand 40,000 jobs in the federal government over to the private sector, and to hand over other sections of government activity to private contractors.

It might be thought that the editors of the *New York Times* are attempting to qualify early for the best April Fool's joke of 1988. But most of what is mentioned above has either been preprogrammed into the budget process, as is the case of water treatment and sewage disposal, or, as in the case of the mooted privatization initiatives, has been under discussion for the last couple of years.

A Baker-for-President budget?

Since this aspect of the budget, if it is as the leaks suggest it will be, is bound to touch off one of the biggest fights with Congress in years, a fight which will ensure that there is no consensus on budget policy during the spring and summer, it may well be the case that the outlined budget is in fact the opening shot of a Howard Baker campaign for the presidency. In which the anonymous White House Chief of Staff emerges as a figure who attempts to pull executive and legislative together, under the conditions of accelerating international crisis that will assuredly develop if what is called the "U.S. budget process" bogs down again in the acrimony and impotence which have characterized the last several years. In this view, Baker would be among the supposed beneficiaries of a provoked knock-down drag-out fight which would increasingly discredit both executive and legislative branches.

Beyond such speculations, there is a simple pattern involved. It's the pattern that has characterized the economic thinking of the group of "buy cheap, sell dear" *nouveaux riches* from southern California who have made up the inner circle of the Reagan group for the past several years.

The key is the question of infrastructure. The proposal to eliminate, or privatize, whole elements of government involvement in water treatment and supply, power generation, transportation, and in front-end type research, of the sort that is under way with the Livermore Advanced Laser Isotope Separation process for uranium enrichment, has been a consistent refrain throughout both Reagan administrations.

No one seems to understand that the value of an economic

system, or sub-system, is not its liquidation book value on the auctioneer's block, but rather the direct and indirect benefits accruing to the economy as a whole, in the form of cheapening the costs of producing and distributing the goods and services on which we all depend. Across the country, cities are on the verge of public health nightmares because of the incipient or actual breakdown of water supply and sewage treatment. Boston, Chicago, and Los Angeles are but three examples.

If the federal government now proceeds with the policy that was adopted four years ago, and ends federal support for such necessary projects, one is justified in asking who will pick up the tab for such vital services, and how will they be paid for. State and local governments are on a pay-as-you-go basis, suffering more than the federal government from the depression-caused collapse in the tax base. They are not good candidates to pick up the costs, no matter how loudly the federal government insists that such costs are appropriately borne at the state and local level. Nor is private industry any better. Where in this post October market-collapse world are private entrepreneurs going to get the financial backing to take-over such services? How will consumer charges be assessed? It won't work.

Yet, even without the kind of destructive commitment that's implied in the budget leak, these types of services are going to continue to deteriorate anyway.

Liquidating the work of generations

What's at stake here is very simple. As the case of the nation's economic infrastructure exemplifies, we are looking at the dismantling of the capital improvements which, over the span of the generations who built up this country from the 17th century onward, are what made America the power it once was. Now the proposal is to liquidate the work of generations for immediate cash gains, or to let it into the hands of so-called private interests, who will become the equivalent of ancient tax farmers on the basis of the licenses granted to operate the infrastructural service concessions. Either way, the country and its population is going to lose.

There's one simple alternative to all this. Break with the ideological bug-a-boos. Break with the obsessional insanity of the commitment to lies and half-truths, and face up to the simple reality, that in a depression, budgets cannot be balanced by cutting back categories of expenditure. The fat was cut a long time ago. Now it's into the very bone. The only way to do the job, for all levels of government, is to increase the revenue base, by putting people back to work, in productive jobs, to build on the work of the generations who went before, not strip it down.

Perhaps the insanity of the President's leaked budget message will help make that clear. If it doesn't, then perhaps the kind of crisis which will certainly ensue from the introduction of that tissue of lies and ideological garbage into the legislative process, will.

Prominent signers back 'stop euthanasia' call

"It should not go unpunished that today, 43 years after the defeat of the Nazi regime, people once again dare to advocate and implement euthanasia, making themselves judges over other people's lives, allegedly unworthy of being lived. This is murder pure and simple, and incitement to murder."

So begins an "urgent appeal" issued by the Club of Life in early February, with signers from four continents. The Club is an international organization founded by Helga Zepp-LaRouche, wife of American presidential candidate Lyndon LaRouche. The Club is dedicated to fighting the policy approach to depression conditions that finds human life too "expensive" to preserve. The appeal charges that while euthanasia is often portrayed as "mercy killing," it is motivated solely by health-care cost-cutting considerations.

The appeal has many prominent signers from Europe, Asia, the Middle East, and the United States, among them:

- Dr. Ram Isahir, head of the Israeli Medical Association
- Dr. Simon Wiesenthal of the Jewish Documentation Center of Vienna
- Adrianus Cardinal Simonis, Archbishop of Utrecht, the Netherlands
 - French Resistance heroine Marie-Madeleine Fourcade
- Retired Brig.-Gen. Friedrich-Wilhelm Grunewald of West Germany
- Dr. Ricardo Martín Mora, former deputy attorny general of Peru
- Dr. Leopoldo Frenkel, the former mayor of Buenos Aires, Argentina
 - Retired Adm. Karl-Adolf Zenker of West Germany
- Prof. Frederick Wills, the former justice minister of Guyana
- •Dr. Mana Boonkhanphol, the director of St. Louis Hospital in Thailand
- Dr. Norbert Brainin, first violinist of the Amadeus Ouartet.

Other signers include doctors, lawyers, professors, and religious and political figures from Israel, Italy, Sweden, Denmark, England, West Germany, Thailand, and the United States.

The appeal sharply attacks the notion spread by "Right to Die" organizations "that one must respect the decision of the patient if such a patient wants to end a life 'not worth living.'"

It asserts: "Lurking behind the euthanasia campaign is not a shred of "respect" for the desires of afflicted persons—it is merely brutal cost accounting."

Such notorious euthanasia advocates and practitioners as West Germany's Dr. Julius Hackethal and that country's Society for a Humane Death are singled out for denunciation as murderers, as is the entire government and medical community of Holland, where "it is estimated that . . . as many as 10% of all deaths can already be attributed to euthanasia, and ever more elderly and ill people are refusing to be admitted to hospitals and care homes, because they fear being killed as a cost-saving measure."

United States no better

But the United States is little better, the statement reports.

"Emergency cases in the U.S.A. over 50 years of age are no longer given medical care if they are not able to prove that they have the financial means to pay, and it is an open secret that active euthanasia is common practice in most hospitals and hospices."

It continues: "Furthermore, there is a degree of panic among all governments of the industrial nations that the AIDS epidemic will produce a cost-explosion in health care which will shatter all cost-reduction efforts in their health systems. Treatment of a single AIDS patient costs between 2-300,000 German Marks, and the costs will soon be astronomical. Is it any surprise that these neo-Nazi ideologues have already proposed that AIDS victims should be eliminated by euthanasia?

"Once the threshold of the inviolability and sacredness of human life is broken, when political powers turn themselves into judges over the lives of the weak and the poor, then a repetition of the barbarity of the Nazis, in far greater dimensions, will unfortunately become reality. The very existence of the African continent is threatened by the AIDS epidemic, 450 million people are threatened with death—and the governments of the North know it—without granting the help possible.

"Every human life on this planet must be protected, because every person carries within himself or herself a part of the divine. It is the respect for this absolute dignity of the individual and his right to life which differentiates us from all dictatorships. And it was the denial of this right which made the euthanasia and extermination programs of the Nazis possible.

"We, the undersigned, appeal to Western governments and politicians to implement clear measures to prohibit and punish euthanasia in any form, be it active or passive in form. We make this appeal on the basis of the same principles established in the Nuremberg trials.

"If we, who are in full possession of our mental and bodily strength, do not care for the weak and the poor, this sin of omission will be the cause of our own demise. Help us to defend the human dignity of all individuals!"

Schmidt's Inter-Action genocidalists target Africa, look to Moscow

by Mark Burdman

From March 20 to 22, the Inter-Action Council of Former World Leaders, chaired by ex-Chancellor of West Germany Helmut Schmidt, will be holding a meeting of its policy board in Harare, Zimbabwe to develop policy recommendations toward Africa, *EIR* has learned. Later, in mid-May, the council will hold its annual meeting, in Moscow.

According to sources close to Schmidt, two of the panels in Zimbabwe will be on "Southern Africa and Apartheid" and "The Political Conflict in the Sudan," both to be chaired by policy board co-chairman Manuel Ulloa of Peru. Once Peru's finance minister, Ulloa is a bitter foe of a new world economic order and Third World development, and of the "10% solution" on debt repayment adopted by Peru's President Alan García. (Two African nations, Zambia and Ivory Coast, have adopted that policy in the past few months.)

The third panel will be on "The Economic Situation Facing the Nations of Black Africa." Discussion coordinator will be Sir Shridath Ramphal, Secretary General of the Commonwealth and a co-thinker of the British Fabian Society; panel chairman will be Mario Schimberni, former head of Italy's Montedison conglomerate. Schimberni is an associate of Henry Kissinger and a member of the Trilateral Commission. During his tenure as Montedison head, the company was reputed for its strong orientation toward developing, not the Third World, but the Soviet Union.

The apartheid and Sudan panels will put forward new approaches to "regional crisis-management" by the superpowers, sources close to Schmidt affirm. For the first, witnesses representing the Soviet-run African National Congress, the South African government, etc., will testify, in a kind of "tribunal" on apartheid. For the second, Ulloa will draw upon the political connections and ideas of former Nigerian head of state Olusegun Obasanjo, to place the Inter-Action Council in a position to "mediate" the political crisis in Sudan.

Sudan has been wracked by ethnic-tribal gangs, backed variously by the Soviets, the Israelis, the CIA, and other

intelligence agencies and organizations. Years of internecine warfare have virtually destroyed Sudan's enormous agricultural potential, a policy mandated by the banking institutions and food-grain interests to which Schmidt is allied.

"Regional crisis-management" discussions on these areas are to be seen as part of the Inter-Action Council's preparations for its annual summit. Tentatively planned for mid to late-May in Moscow. On that occasion, Helmut Schmidt is planning to give an exegesis on "the state of the world economy to the year 2000 and beyond."

The three days of discussions in Zimbabwe are an obvious countermove to the initiatives for development of Africa recently proposed by the Schiller Institute, Pope John Paul II, and like-minded organizations and individuals.

The subject of development of Africa featured significantly in a Jan. 30-31 Schiller Institute conference in Andover, Massachusetts on a new world economic order to replace the defunct Bretton Woods system. The Institute, founded in 1984 by Helga Zepp-LaRouche, published a book in 1986, *Ibero-American Integration*, which is the acknowledged text for a new economic order in that region.

From the Vatican side, Pope John Paul II in February will be releasing an encyclical inspired by Pope Paul VI's 1967 *Populorum Progressio*, which had the theme, "The new name for peace is development." The Pope has sent two of his close aides, Roger Cardinal Etchegeray, head of the Justitia et Pax organization, and Cardinal Poupard, to Ethiopia, Burkina Faso, and Nigeria. At the beginning of February, John Paul II met with French Agriculture Minister François Guillaume, the author of a Vatican-supported "Marshall Plan" for development of Africa (see page 10). During 1988, the Pope is planning to make a tour of the southern part of Africa, although not including the Republic of South Africa.

'The aim is to stop procreation'

Since its founding in 1982-83, the Inter-Action Council has represented a regroupment, at a higher political level, of

the networks associated with the late Aurelio Peccei's Club of Rome International. Whereas the latter was largely composed of technocrats, malthusian economic planners, and kook scientists, the Inter-Action Council operates as a de facto world-government-in-exile, composed of former heads of government, former ministers, and other high-ranking has-beens. The two most active of these are Schmidt and former Japanese Prime Minister Takeo Fukuda. Others include former Swiss President Kurt Fürgler, former Canadian Prime Minister Pierre-Elliott Trudeau, former Nigerian head of state Obasanjo, and former Australian Prime Minister Malcolm Fraser.

Besides the Council as such, a Council Policy Board has been set up, co-chaired by Ulloa and former U.S. Democratic National Committee chairman Robert Strauss. Strauss, from Texas, has built significant political and economies ties in the United States to the interests of Soviet agent Armand Hammer and Hammer's successor, Dwayne Andreas of the Archer-Daniels-Midland conglomerate.

Other policy board influentials include former Soviet Ambassador to West Germany Vladimir Semyonov and former Soviet Ambassador-at-Large Vladimir Suslov; former Chinese Prime Minister Huang Hua; Canadian energy magnate and Club of Rome patron Maurice Strong; and recently appointed UNESCO head Federico Mayor Zaragoza, formerly Spanish minister of education. *EIR* has exposed Mayor Zaragoza as a Soviet agent of influence.

The initiator of the Council was Bradford Morse, until recently the head of the United Nations Development Program in New York City. Morse, during much of the 1980s, served as coordinator of the United Nations Emergency Relief Program for Africa, the chief patron of which was Canada's Maurice Strong.

Morse's successor at UNDP is William Draper II, son of Col. William Draper, one of the most radical advocates of population reduction in the United States in the postwar period.

Soon after the Council's creation in 1982-83, Perdita Huston became one of its chief staffers in Washington. She was then a member of the U.S. Association for the Club of Rome. During 1987, Ms. Huston was coopted to head a new "population-studies" division at the Geneva headquarters of the International Union for the Conservation of Nature (IUCN), founded in the late 1940s as an offshoot of the Swiss League for the Protection of Nature and UNESCO. The IUCN shares its office-complex with the World Wildlife Fund International, whose chief is the Britain's Prince Philip, husband to the Queen. Feb. 1-10, 1988, the IUCN-WWFI complex held a conference in Costa Rica, collecting over 1,500 "conservation" fanatics representing hundreds of organizations from around the world, to discuss a "World Conservation Strategy."

By "conservation," Prince Philip and his friends mean putting an end to the interference of "non-white" races with

the purity of nature and wildlife species—in short, to prevent such peoples' economic development, and greatly reduce their numbers.

Schmidt and Fukuda have made the Inter-Action Council a mouthpiece for population-reduction policies. During March 11-12, 1987, for example, the council held a meeting in Rome, which included leaders of the five major world faiths, among them Cardinals Casaroli and Koenig, to try to induce a change in the views of the Vatican on population growth.

According to an aide to Schmidt who talked to this reporter in April 1987, the aim of the meeting was to bring the outstanding representatives of the major religions into dialogue on the "theological, religious, and cultural aspects of population growth . . . because they have leverage in the cultural-religious realm bearing on procreation behavior." The effort complemented an September 1986 conference organized by Prince Philip and the WWF in Assisi, Italy, with the aim of smuggling zero-growth and "conservation" perspectives into the major religions.

Schmidt's idea, said his aide, is to "alert more global attention to this issue. . . . He seeks a dampening, or at least a slowing down of population growth worldwide, and to bring this issue more to the attention of the present Pope, who is not inclined to such a view. . . . Family planning is a major step to the solution of most of the world's problems. . . . The aim is to stop procreation, with the aim of coming down to a more stable behavior at a lower level than at present. . . . Schmidt always remembers that today's children are tomorrow's mothers."

The aide welcomed the drop in population-growth rates in both Eastern and Western Europe, and praised the "softer" views on population growth of the German Evangelical Church (EKD, Lutheran), relative to the Roman Catholic Church. (Malthusianism has been so successful in West Germany that military planners now fear the country will not be able to maintain an army in the coming decades for lack of youth to fill its ranks.)

Schmidt's special target is Ibero-America, the stronghold of Roman Catholicism. He has mobilized "left Catholics" allied to Ulloa, to win Church leaders to a genocide perspective. Among these are Argentina's Arturo Frondizi and Venezuela's Carlos Andrés Pérez. Said Schmidt's aide, "The present posture of the present Pope and his episcopate have a catastrophic bearing on population growth in Latin America, the main Catholic continent. Mr. Schmidt is trying to use all his channels in the Vatican to change this. . . . The present Pope is not inclined to social progress, which is based on stopping procreation in the developing sector."

Economics of shocks and chains

The population-reduction campaign, is a subsumed feature of an economic-policy approach adapted from Lord Keynes, the founder of the International Monetary Fund, and from Hitler's Economics Minister Hjalmar Schacht. Said one

Schmidt associate, "If you ask me what the orientation will be for the kind of global, macro-economic planning that Schmidt wants, I would say, 'Keynes, Keynes, Keynes'. . . Schacht can come in at a later date."

Many do not know that Keynes was a creator of what some have called "the Homintern," or Homosexual International, during his tenure at Cambridge at the turn of the century. He was a leading figure in the Cambridge "Apostles," a freemasonic secret society. He advocated "the higher sodomy," premised in a belief in the moral inferiority of women.

Schmidt is regarded in Inter-Action circles as a guru in economics, and is called, "the Boss." His own economic conceptions come from his tutelage in Hamburg by the financial elites associated with the Warburg clan, particularly Erik Warburg, the current sage of the family. The Warburgs are among those in Europe who imagine they can use the Western world's financial collapse to reassert the power of feudalist European families. Their tactical plan is to make the European Currency Unit (ECU) the new, post-dollar world reserve currency, and create a world central bank, in the context of the shifts due to occur in 1992, when Western Europe is to become one, integrated market, or what one Schmidt associate calls "one economic space."

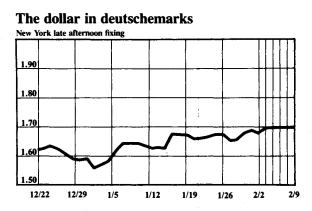
The Schmidt circle thinks and hopes that, under such conditions, the sovereign nation-state will disappear. As one Schmidt/Inter-Action insider put it in a January 1988 discussion: "Very little is left of the concept of national sovereignty anyway. It is a concept of the 19th century, born in the Middle Ages. . . . The nation-state will go down the drain, as a concept. . . . Take the United States, for example. It has never been a nation-state. It's a state, not a nation. It's a complexity of sources of population, citizens who have a sentiment of belonging to an area."

The Schmidt crowd's conception of a reemergent Europe, heading a neo-feudalist world order, merges into straight cabbalistic mysticism: The world is shifting into a "multipolar" geometry, as new "power poles" (Europe, China) are added to the United States and the Soviet Union.

But in practice, this means support for "New Yalta" deals with Moscow. (Schmidt proclaims himself to be the conceptual author of the Reagan-Gorbachov INF treaty.) What the Inter-Action Council is ultimately engaged in, is making the world safe for, not a "multipolar" world, but the emergence of a global Soviet empire.

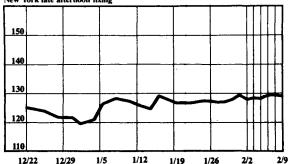
The Inter-Action Council's last summit, in Malaysia in late April 1987, put forward a strategic program that echoed, in nearly every significant respect, Gorbachov's twaddle about a "non-nuclear world," opposition to the U.S. Strategic Defense Initiative, and support for the Soviet interpretation of the ABM treaty. On the economic front, it proposed more austerity for the developing world. Certainly, such matters will figure high on the agenda of Inter-Action's next summit, in Moscow.

Currency Rates



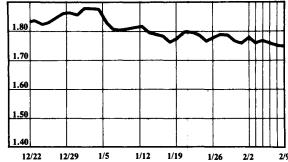
The dollar in yen





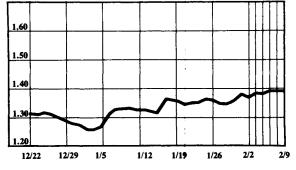
The British pound in dollars

New York late afternoon fixing



The dollar in Swiss francs

New York late afternoon fixing



The Guillaume Plan for promoting growth in developing countries

French Agriculture Minister François Guillaume is currently circulating internationally a valuable proposal for promoting agriculture in the ThirdWorld, which has received almost no coverage in the press in the United States, except in this magazine. We publish here a translation from the French of a pamphlet published by the French Agricultural Ministry, as a contribution to the ongoing debate on what should replace the bankrupt Bretton Woods monetary system.

In 1977, François Guillaume, then a farming official, put forth the idea of a new type of aid for developing countries, whose effects would be comparable to those of the Marshall Plan in a ruined postwar Europe.

Today, François Guillaume's proposal has become a fullfledged plan backed by the French government as well as by many political and moral leaders from all continents. It involves a concerted and progressive regulation of the major agricultural markets so as to be able to finance Third World development.

It is not merely a matter of providing sufficient food assistance; it is also necessary to set into motion a more local development process, and to encourage training programs, infrastructure build-up, and materials acquisition.

The essential advantage of the plan is that it contains within itself the funds needed, and now lacking, to launch a real effort for planetary development and to allow hardship countries to gain economic independence.

A solution does exist and François Guillaume will continue organizing internationally to get it accepted. For greater justice and greater solidarity.

Two planets

In spite of ever more urgent appeals for international solidarity, in spite of a greater mobilization of public opinion, especially of young people, in spite of increasing amounts of aid given to the Third World, hunger continues to conquer ever more territory. Today, 730 million people suffer directly from malnutrition.

During this time, agricultural resources are piling up in the rich countries. In 1987, available grain reserves were estimated by the FAO at 448 million tons. Theoretically, this is enough to feed the undernourished population of the world for 10 years! One Earth, two planets, separated by the border of hunger.

Over-indebted, unable to reimburse loans contracted, Third World countries seem to be sinking deeper and deeper into poverty, in spite of the economic aid programs and technology transfers implemented by Western countries. This phenomenon raises, of course, the general question of the economic future of these countries, as well as the increasingly crucial question of their populations' living conditions. But this problem does not concern developing countries alone. In order to deal with the drop in solvency and the related reduction of the world market, producing countries have entered into a trade war which has led to a spectacular drop in world agricultural prices (grain prices have fallen by 60% in two years). This drop, which penalizes farmers in the producing countries, benefits mainly those solvent nations such as Japan, the U.S.S.R., or Saudi Arabia, who can buy cheaply the agricultural products they need. An example: a ton of grain is bought today by these countries at 50% of its cost price, the difference being paid by the exporting countries, led by the United States and the EEC. These low import prices are only apparently advantageous for purchasing countries in the developing sector, since they discourage efforts to develop their own food production.

Even more paradoxically, this agricultural disorder penalizes the developing countries' farmers themselves, who, in turn, experience a reduction in the world market of food products such as coffee or cacao, and therefore, a lowering of their income.

The limits of international aid

Western nations devote a signficant percentage of their Gross National Product to supporting developing countries (food aid, provision of materials, technicians sent there. . .). Backed by non-governmental organizations or upon their own initiative, these Western nations can meet a number of the needs of the poorest countries. In 1987, food aid alone represented a transfer of 10 million tons of grain.

It is fitting to stress, however, that, however useful and necessary this aid may be, it only partially solves the problems that developing countries' populations face: faltering coordination, limited logistical capabilities in receiving

countries, high distribution costs, and lack of skilled labor, mean that food deliveries are frequently not all distributed or that material is under-used. Moreover, food aid alone in certain cases can have an adverse effect on local production and destabilize markets, which are very vulnerable because of their limited size.

For humanitarian as well as economic reasons, it is therefore necessary that Third World countries cope with their own difficulties. This is a precondition for their international credibility and a guarantee for their independence. The World Bank has well understood this, by stressing that food security for most of the concerned countries means a strengthening of local agriculture and an increase in the purchasing power of the population, and only a process of growth can bring this about. This latter conclusion reminds one of the principles guiding the postwar reconstruction of Europe, the "Marshall Plan" which enabled the old continent to follow once again the path of growth. Today, it is not enough to supply bread; the tractor must also be supplied.

This idea was synthesized by François Guillaume as early as 1977, when he proposed a concerted and progressive regulation of the major agricultural markets in order to finance the development of Third World countries. The essential advantage of this solidarity plan is that the source of funding is inherent in it.

The Guillaume Plan in five points

- 1) One of the solutions for financing development aid involves reorganizing the major agricultural markets and implementing a policy of "fair prices," which can also guarantee export incomes for Third World countries. Because of its worldwide importance, and the small number of exporters, the grain market is perfectly adapted to this kind of policy, and, naturally, regulation must then be extended to vital products from developing countries, such as coffee or cacao.
- 2) The five exporting regions (U.S.A., EEC, Canada, Australia, and Argentina), having formed a kind of "food OPEC," must agree on a minimum selling price for their grain, and this price should be at least equal to the cost price of the most competitive country.
- 3) These sales at a fair price would free up the large additional financial means needed to meet the needs of developing countries. For example, the latest sale of grain to the Soviet Union was agreed upon at a price of 450 francs per ton, whereas the average cost price is around 1,250 francs
- 4) The implementation of this plan would not require a new management structure. Financial control will indeed be assured by a Board of Governors who will arrange Enforcement Conventions with existing international agencies whose credibility and efficiency cannot be doubted: IBRD (International Bank for Reconstruction and Development), FAO (Food and Agriculture Organization), IFAD (International Fund for Agricultural Development), UNPD (U.N. Program

of Development).

5) According to expert estimates, this regulation of the grain market could free up to 20 billion francs per year, which could be used to finance a multifaceted plan: a food plan, of course, but also agricultural development operations, support or recovery of local production, delivery of storage equipment, development of distribution circuits, organization of production channels and markets, and training of men.

Convince international leaders

Over the past 10 years, François Guillaume has contacted increasingly more people in order to explain to them the soundness of his plan. In the near future, he will go to Algeria, Egypt, China, and the U.S.S.R. But the most important leg of his tour will be the United States. U.S. agreement is indispensable for implementing the plan.

François Guillaume is already supported by leading political and moral leaders of the international community, first and foremost, by the Holy Father. In February 1987, François Guillaume, in the company of Abbot Piere, had a long audience with Pope John Paul II. Upon the latter's request, François Guillaume is now collaborating very closely with the French Episcopate, through the person of Cardinal Etchegaray, who is also president of the Pontifical Commission Justicia et Pax, and of the Cor Unum Council which takes care of material aid for the impoverished. Together, they are to present proposals to the Sovereign Pontiff. François Guillaume's idea is to bring together the heads of state of the five leading grain producing countries, under the moral authority of the Pope, to convince them to follow the path of solidarity and development.

During his tours, François Guillaume also held discussions with Eduard Saouma, director the FAO, who publicly expressed his interest in the proposal.

Over the following months, François Guillaume went to Tunisia and to several countries of Black Africa. He met with the highest authorities, including Ivory Coast President Houphouet Boigny, who is a key personality in Africa, and received their support. Then the minister traveled to Japan, Thailand, Bangladesh. . . . Always with the same purpose of explaining and convincing.

A concrete approach, country by country

François Guillaume wants to act "more and more quickly" for developing countries, and is therefore building up concrete initiatives to prove his plan is sound. Operations accomplished recently in Africa and Asia illustrate the benefits of a country-by-country approach.

Chad: financing crops. The economic development of Chad was thwarted by a decade of drought and a latent state of war. The zone around Faya Largeau was especially touched by fighting, which wiped out local crop production and made it difficult to get supplies to the population.

To help finance crop production in Faya Largeau, France

has launched an original operation: 2,000 tons of grain will be bought by France in the south of the country and sent to the north. These products will be sold locally at a low price (so as not to disorganize the local market), and the money will be used to relaunch crop production in the Faya zone.

This operation is fully consistent with François Guillaume's practical philosophy: aid which acts as a "spark" for development.

Mali: creating South-South exchanges. Terribly hard hit by drought in 1973 and then again in 1984-85, Mali is fighting for its elementary survival.

During his recent visit to Bamako, François Guillaume took with him nearly 60 tons of potato seedlings and vegetable seedlings to meet the most urgent needs of the country.

At the same time, France will strengthen farmer exchange programs with Mali and supply technical assistance for building up a dairy belt around Bamako.

But the most exemplary action is one which is going to allow Mali's grain surpluses to be sent to Mauritania. France bought 5,000 tons of Malian grain to be donated to Mauritania, where the food situation is particularly critical, a "South-South" operation which benefits both countries and symbolizes the type of aid fostered by François Guillaume within his plan.

Ivory Coast: training assistance. The Ivory Coast is a dynamic country: farming, cattle-growing, and fishing make up a large part of its resources. More than direct or material aid, this country mainly needs technical means and training.

In this context, François Guillaume offered France's help for the future Agriculture School of the Ivory Coast at Yamassoukro. In addition to financial help for construction, French researchers and teachers will be sent down there to make the Agricultural School a "pan-African" training center.

Bangladesh: Increase emergency food aid and cooperation. Bangladesh, one of the poorest countries on Earth, would be one of the first to benefit from the Guillaume Plan. The minister went there in Septmber 1987, after the floods which destroyed the harvest and claimed the lives of nearly 1,000 people.

Once there, the minister immediately decided to double French food assistance to this country and gave 10 million francs for the purchase of alimentary products. At the same time, François Guillaume and the Bangladeshi Prime Minister worked through the terms of French production aid for rice and stock-raising.

Thailand: technical cooperation and participation in irrigation programs. During his stay in Thailand, François Guillaume announced that France would give 8 million francs of financial aid for an irrigation program developed by a French company. The minister also extended Franco-Thai cooperation in stock-raising, set up a research mission into Thailand's technological needs for seeding, and proposed organizing 15 agricultural training programs in France for Thai personnel.





Bolivia swaps debt for . . . Bolivia

by Ricardo Martín

Bolivian President Víctor Paz Estenssoro has just signed a decree offering national territory in exchange for relief on its foreign debt. The announcement was made Jan. 30 by Minister of Peasant Affairs José Guillermo Justiniano, and reported the next day by AFP news service.

Although the text of the decree has not yet been made public, it appears to be the concretization of statements first made last year by then-Ambassador to Washington Fernando Illanes: "If someone gives us \$4 billion [the total of the Bolivian foreign debt], we are ready to hand over half the country." Illanes later claimed he was "only joking."

Illanes, currently Minister of Energy and Hydrocarbons, made his statement to the press on June 22, 1987, after signing a contract in which the government ceded 2 million hectares of land to the new Conservation International Foundation (CIF). The CIF, in exchange, bought up \$650,000 (nominal value) of foreign debt from one of Bolivia's creditors. The CIF, however, paid a mere \$100,000 for the paper, given the substantial devaluation of Bolivian debt on the secondary markets. That money, in turn, was provided by a New York brokerage.

Coca: a 'natural resource'?

The land ceded to the CIF is located in the department of Beni, bordering Brazil, and is an important producer of coca and a center of cocaine-refining laboratories. It is not yet known what the CIF's attitude toward illegal narcotics is, but according to the government, it has pledged to "preserve natural resources" in its newly acquired property.

Bolivian critics of the land-for-debt swap warn that entities such as the CIF could be fronts. "Vital territory could be bought up by drug traffickers, or foreign powers interested in mutilating or dominating Bolivia's national sovereignty, or by multinationals interested in exploiting renewable or nonrenewable resources."

The surrender of land and sovereignty to which Bolivia has committed itself is not an isolated act, but represents the implementation of a strategy that was proposed by Henry Kissinger as far back as August 1983, when he called for "debt-for-equity" swaps. Minister Justiniano also spoke of institutions in Japan, Holland, and West Germany, which have expressed interest in buying up developing sector debt in exchange for territory.

Bolivia's decree establishes a dangerous precedent for Ibero-America. On Dec. 22, 1987, the daily *La Nación* revealed that an organization called the Environment and Natural Resources Fund sent a proposal to the summit meeting of eight Ibero-American Presidents in Acapulco, Mexico in November, urging that the summit agenda include the theme of reducing foreign debt by means of accepting investment in health, education, and resource conservation programs.

The most notorious "resource conservation" blueprint is contained in the book *Our Common Future*, published at Oxford University by the World Commission on Environment and Development. The book simply asserts, "The concept of sovereignty must be changed. . . . Urgent steps are needed to limit extreme rates of population growth. . . . Sustainable development can be pursued more easily when population size is stabilized at a level consistent with the productive capacity of the ecosystem."

At the end of September 1987, several members of that commission—such as Susanna Agnelli, sister of FIAT magnate Gianni Agnelli—visited the heads of state of Argentina, Brazil, and Peru to propose the "simple" solution of debtfor-land swaps. Several nations have already dabbled in the swap plan, and other governments—like those of Brazil and Chile—are seriously considering the proposal under cover of "a commitment to preserve certain regions as natural zones of animal and plant life."

In Peru, officials of the forestry and fauna division of the Agriculture Ministry told the daily *El Comercio* Jan. 14, "The exchange of a part of the foreign debt with the private organization Conservation International" is virtually a fact. Foreign Ministry officials stated, "It constitutes an interesting solution at this time." The final decision, however, is up to the Peruvian Finance Ministry, although studies are already being made to determine which are the "ecologically significant" regions of the country.

Target the oil

Mexico, with its coveted oil-rich lands, is a key target of these plans. At a Feb. 9 press conference in Mexico City, Britain's Royal Consort Prince Philip, president of the World Wildlife Fund (WWF), announced that his organization was prepared to buy up Mexican debt—through a mechanism similar to swaps—and to invest that money in conservation of Mexico's natural resources. He claimed that the double advantage of his plan is that the Third World would get debt relief and its natural resources would simultaneously be preserved.

Philip noted that such debt-for-land swaps had already been carried out in Costa Rica, to the tune of \$5.4 million, and in Ecuador, where debt-for-land swaps have reached \$1 million. The WWF is now negotiating with the Philippines.

Agriculture by Marion Peretti

'Set aside' fiasco pushed in Europe

The Brussels bureaucrats have another scheme to cut their budget—and make farming more backward.

High on the agenda of the mid-February summit of the European Community in Brussels is an item designed to further wreck European agriculture: implementation of the notorious "set aside" policy of the U.S. Department of Agriculture—known in Europe by its American name—for idling cropland to cut production.

The "set aside" program comes on the heels of the quota system to strangle milk, meat, and wine production, under the pretext of overproduction.

The EC bureaucrats plan to transfer funds now used to support the prices of farm products, into the "set aside" programs. A subsidy between \$480-720 will be paid per year for each idled hectare, depending on the fertility of the fields, with 50-60% of the costs coming from member governments. The aim is to obtain a savings of about 40%, since between price supports, withdrawing surplus from the markets, and warehousing it, the EC now pays about \$1,000 for the production of a single hectare, which is about 50 quintals, or 5,000 kilos, of grain.

The "set aside" model is an austerity model that goes back to the extensive farming mode that prevailed before Justus Liebig, the 19th-century German chemist, pioneered modern intensive agriculture, and made it possible to triple harvests by introducing chemical and mineral fertilizers. At that time, half as much food as today was produced on three times the land, with a labor force that was most of the population.

The return to pre-capitalist times and a servile peasantry seems to suit the malthusian EC bureaucrats. More-

over, this farm policy is designed to use the pretext of "too much surplus" to reduce prices to farmers and bankrupt them, with the result of reducing of food production—and world population.

There has been talk on the eve of the EC summit, of fixing ceilings for both grain production and the crops grown in tandem with grain—sunflower, soybeans, and other oilseeds—and to penalize overproduction of them.

In reality, the debate on "European Community surplus" is a fraud. Even the EC's own published data show this. In the EC warehouses are 12 million tons of grain. With an annual consumption of 155 million tons, these stocks would only supply European consumption for 28 days.

Scientifically speaking, a hectare of land absorbs an average of 3 trillion calories of solar energy, or about 380 kW per hectare. With modern intensive agriculture, 1% or more of this energy is transformed by photosynthesis into plant cells, or biomass. The efficiency of this process on uncultivated land is only 0.1-0.2%. In the photosynthesis process, oxygen is produced and released into the air, while the plants take the carbon dioxide from the air, produced by respiration and by combustion in industry, etc.

It can be said that the EC Council of Ministers wants to cut oxygen production by about 20%, given that they wish to reduce farm production by 20%. Adding the wave of financial bankruptcies in the farm sector (31,000 farms have shut down since 1982),

desertification lies ahead. It is an already acute problem in southern Italy, due to lack of cultivation, reforestation, and water.

In Sicily alone this year, 850,000 tons of citrus fruits will be destroyed; exports have dropped by 30%. This happens, even though for 20 years the technology has existed to irradiate food with cobalt-60, which would allow the fruit to be sterilized and shipped all over the world.

In Germany, some desperate farmers have started a pilot experiment. The project provides that land which has been "set aside" for not growing wheat or rye will be planted with vegetables such as beets or potatoes, to keep the soil from becoming impoverished. But they have to commit themselves to not sell these crops or even feed them to livestock!

The crazy solutions presented by the EC are being forcefully backed by Ernst Albrecht, the Christian Democratic minister-president of the West German state of Lower Saxony, where the "set aside" model has been applied. Albrecht, mooted to succeed Jacques Delors in the presidency of the EC Commission, is notorious as one of the first German politicians to open the way to Greenie anti-nuclear violence, by his non-interventionist policy.

Italian politicians are not far behind Albrecht. The president of Italy's family farmers' organization Coldiretti, Arcangelo Lobianco, is putting up some fight. Speaking to a convention in Naples on Feb. 2 on agriculture's prospects for 1988, he warned, "The 'set aside' policy is certainly not equally applicable through the Community's area. In Italy, for example, it cannot be applied in absolute terms, except through depopulation and resultant impoverishment of some zones, and environmental damage."

City of London by Stephen Lewis

New threat to market stability

The securities houses are carrying huge amounts of U.S.Treasury securities on their own books.

Between last October's stock market crash and the end of the year, Wall Street commentators became increasingly confident that the economy would come through unscathed.

That confidence is now being severely tested.

United States retail sales are slipping back and the auto industry is cutting down production schedules.

January's employment report set the seal on the change of mood, showing fresh signs of weakness in the economy.

It was facile to expect that the collapse in stock prices would impact on the economy within so short a period as a few weeks.

The conventional Wall Street view that a decline in financial market prices from the overblown levels of last October should, in itself, have little bearing on the performance of the productive economy, contains some truth.

After all, the 50% rise in stock prices which preceded the crash, in the first nine months of 1987, was far from signaling strength in U.S. economic activity.

The stock market's rise had been fueled by the United States Federal Reserve's credit policies and fueled by securities dealers' encouragement of speculation in the options and futures markets.

This has now been admitted—even in the Brady Commission Report to the White House and the independent Securities and Exchange Commission report on the October crash.

Nevertheless, there is likely to be an indirect effect on the economy from the generally weak state of the financial structure.

The losses incurred on October 19 and in its aftermath added to the strains already felt in the securities trading sector of the markets.

These strains stemmed from the securities companies' holdings of junk bonds when the bond market turned sour last spring.

Heavy losses were also inflicted on government securities dealers as a result of the volatile behavior of bond markets around the U.S. Treasury auctions last year.

The shaky state of Wall Street finances not only shows up in layoffs at the securities companies; it is also inducing a mood of caution among investors.

More damaging than the decline in the level of the Dow Jones Industrial Index is the shrinkage in market turnover to well under one-half of what it was pre-crash.

This indicates the low level of confidence among investors about the future and compounds the effect of the stock market crash on securities companies' revenues.

A new threat to the stability of the market has emerged with the most recent United States Treasury auction.

Between February 2 and February 4, the U.S. Treasury sold at auction, in all. \$27 billion of notes and bonds.

There had been rumors ahead of the auction that the Bank of Japan and perhaps other central banks would take most of the bonds offered by the Trea-

Although the Bank of Japan issued

an official denial of these reports, the securities houses felt that they could not afford to be short of bonds going in to the auction and bid aggressively for paper in the open market.

Long-dated U.S. Treasury bond yields fell from 9.0% to 8.3%, a level so low as to give little hope that yieldconscious end-investors would bail out the securities houses if their calculations went awry.

In the event, Japanese participation in the auction seems to have been no stronger than is usual.

The central banks appear not to have taken bonds on any appreciable scale.

The consequences of this is that the securities houses are carrying huge amounts of Treasury securities on their own books.

They are unlikely to be able to sustain this position for long since the borrowing costs associated with these positions are eating into their profits.

At the same time, if they unload bonds onto the market, they risk taking prices much lower than those at which they originally bid for the bonds, thereby incurring substantial dealing

Only if indications of recession multiply are the securities houses likely to be able to avoid losses on their bonds, since recession would encourage expectations of lower interest rates.

If these indications are not forthcoming, the parlous condition of the securities houses and the dislocation of financial markets which this is likely to trigger could itself strengthen recessionary forces in the economy.

Stephen Lewis is a stockbroker in the London stock exchange who contributes this column on an occasional basis to Executive Intelligence Review.

Business Briefs

Development

Japan will give India long-term loans

Japan will extend close to \$1 billion in development and commodity aid to India in 1988, for various public and private sector projects, *The Hindu* newspaper reported on Feb. 7.

The aid will be directed through the Exim Bank of Japan and multilateral institutions like the Asian Development Bank. A notable feature of the aid is that much of it will be unconditional. Although the loans they are commercial, they will be long-term credits repayable in about 20 years and will carry a relatively low interest rate of about 5.3%.

The loans will be separate from the project aid that Japan has been extending to India every year through the Aid-India Consortium.

Of the new loans, about \$450 million will go for thermal power projects, and about \$110 million for railway modernization. A Japanese team will be visiting India in March to study the projects for which India is seeking aid.

Industry

Houston loses its last steelmaker

USX, formerly U.S. Steel, the nation's largest steelmaker, has announced that it will permanently close its Texas Works steel mill in Baytown, near Houston. The plant was idled by USX one year ago, after being closed for six months by a strike.

The Texas Works, which opened in 1970, was partially dependent on the depressed oil-drilling industry. It produced 48-inchrdiameter line pipe, as well as plates for barges, freight cars, oil storage tanks, and offshore drilling platforms.

The plate mill was capable of producing more than 1.5 million tons a year. But nationwide 1986 demand for plate sank to 3.5 million tons, from 8 million tons in 1980,

according to USX.

At its peak, the mill employed about 2,000 workers; there were about 850 at the time of the strike, and about 615 may be eligible for shutdown benefits. About 50 are eligible for pensions.

The closing leaves Houston without an integrated steelmaker. Armoo closed its huge mill on the Ship Channel in 1982.

Soviet Union

War economy chief takes over Gosplan

The Kremlin has named as the new head of the State Planning Committee (Gosplan) the man who has been responsible for all military-related industry in the Soviet Union. Yuri Maslyukov, 50, was named to succeed Nikolai Talyzin at Gosplan.

Maslyukov was first deputy chairman of Gosplan from 1982 to 1985. Since November 1985, Maslyukov has been in charge of the Military-Industrial Commission of the U.S.S.R. Council of Ministers.

Maslyukov is also expected to be named a candidate Politburo member at the Central Committee plenum in mid-February

His appointment is the second top-level war-economy-related personnel move since November, when a special meeting of the Moscow Party Central Committee named Lev Zaikov the new boss of the Moscow party, replacing Boris Yeltsin. In a break with tradition, Zaikov, a Politburo member, was permitted to retain his post on the Central Committee Secretariat as overseer of the military-industrial complex.

According to TASS, Nikolai Talyzin, the man Maslyukov is replacing, has been demoted to chairman of the Social Development Bureau. Approximately seven months ago, Mikhail Gorbachov had attacked his handling of the economy at a full meeting of the Central Committee.

Analysts quoted by Reuter, however, cautioned that Talyzin could, on the contrary, be promoted to full membership on the Politburo. Talyzin's new Social Development Bureau post fills a vacancy left in October by the purging of Geidar Aliyev, who

also lost his Politburo seat. They point out that Talyzin remains one of three first deputy premiers. One of the others is Maslyukov.

Nuclear Energy

U.S., Soviets said to pressure Subcontinent

Both the United States and the Soviet Union are working to prevent India and Pakistan from becoming nuclear-weapons powers, according to commentator Brahma Chellaney, writing in the Indian newspaper *The Statesman* on Feb. 8.

The Soviets, he wrote, are putting pressure on India to take two ofthe obsolete Soviet VVER-440 nuclear reactors. The VVER-1000 model, which malfunctioned at Chernobyl, has been mothballed, and the Russians themselves are now going for the VVER-1800 model. They are offering 2.5% interest to be paid over 20 years, to try to lure the Indians into the deal.

Chellaney adds that the Viktor Class 1 nuclear submarine, which the Indians have taken from the U.S.S.R. on a four-year lease, is intended to force the Indians to rely on a more obsolete nuclear submarine, and to enable the Soviet Union to "get inside" the Indian nuclear program and prevent India from making nuclear weapons.

Chellaney charges that Washington is pursuing the same kind of policy toward Pakistan, which is heavily dependent on the United States for arms and cash, and whose rulers are being pressured to curb the nuclear program.

Poverty

Reagan bill provides for no new housing

President Reagan signed a two-year, \$32.3 billion housing bill that would provide welfare recipients with vouchers to pay their rent at existing slums, and subsidize the sale of such public housing to residents. The bill,

however, provides for no new low-income housing.

The bill would "privatize" large chunks of existing public housing by allowing residents to purchase their apartments at a huge discount. They could not sell the units for five years, after which they could sell their units to private interests.

"This legislation puts the private market to work in supplying rental housing by enabling the government to help needy families with vouchers so they can afford to rent housing of their own choosing," said the President at a signing ceremony at the White House Feb. 5. "It provides new opportunities for public housing residents to take control of their own lives by managing or buying their own housing."

The bill is a giant step toward removing the U.S. government from the responsibility of seeing that Americans are well housed, first enunciated by President Roosevelt during the Great Depression.

Infrastructure

Egypt declares water emergency

Egypt, plagued by extremely low water levels in the Nile, has declared a national emergency in anticipation of water and energy shortages. The announcement was made Feb. 7 by Energy Minister Maher Abaza.

The emergency declaration came after an alarming fall in the water level in Lake Nasser at the Aswan Dam.

The approaching crisis had been evident for several months. Last December, President Mubarak chaired an emergency meeting of his cabinet to review the Nile water crisis.

According to Abaza, the low level of the Nile will not only mean shortages of water in late spring and summer, but curtailed electricity production. The Aswan Dam provides more than 40% of Egypt's electricity needs.

Officials cited as the cause of the low water levels five years of drought in Central Africa, with attendant affects on the Nile. However, drought is not solely responsible.

In past years, water-management projects throughout the Nile region have been canceled under the pressure of the International Monetary Fund, with the backing of Washington. Of special importance was the discontinuation of work on Sudan's Jonglei Canal.

In mid-February, Cairo will chair a meeting of Egypt, Zaire, Uganda, and Sudan. Significantly, the government of Ethiopia, where the Blue Nile has its source, will not be represented.

Banking

Top German banker wants world central bank

Alfred Herrhausen, of the managing board of Deutsche Bank, told Die Welt Feb. 8 that he favors a world central bank, and that a first step in this direction should be the formation of a European Central Bank. Such a bank must be independent politically, financially, and in personnel, with the clear mission to guarantee price stability.

He made the remarks following the closed two-day "management summit" in Stuttgart, organized by Lothar Spaeth, governor of Baden-Württemberg, which featured the heads of many European industries.

Herrhausen also endorsed ideas earlier expressed by Crédit Suisse's Hans-Georg Rudloff. "In former times," he said, "the movement of international currencies was the 'veil' covering the international transfer of goods. Money was the means by which the flow of goods was financed. This relationship is today either not true at all, or true only in extremely loose form. Today, international monetary traffic flows are 25 times greater than the cross-border flow of goods."

Die Welt asked him if it would not be sensible to restore some relationship between money flows and trade flows. "That is hardly possible any possible," he answered, "because the domain of international capital flows has become so powerfully independent. One cannot turn back the wheel of history."

Briefly

- BRAZIL and Colombia announced a series of economic deals after a visit to Bogota by Brazil's President Jose Sarney. They include a \$10 million Brazilian loan to build four airports in Colombia's jungle territories, Brazilian cooperation in reconstruction of Colombia's decrepit rail system, the exchange of 300,000 tons of Colombian coal for Brazilian weapons, and a three year program of joint mineral exploration in their border area.
- THE BANK of Dallas, an independent bank with assets of \$193.9 million, became the seventh bank to fail in Texas in 1988, and the largest bank failure in Dallas history. It was declared insolvent by state authorities on Feb. 5. "Aggressive lending practices" were cited as the cause of the collapse.
- GENERAL MOTORS nounced Feb. 9 that its earnings rose 21% in 1987, to \$3.6 billion, but that only about \$130 billion of this came from sales of cars and trucks. The bulk came from three main subsidiaries: General Motors Acceptance Corporation, its financial arm, which reported 1987 profits of \$1.5 billion, up from \$1.2 billion in 1986; Electronic Data Systems Corp., its computer services operation; GM/Hughes Electronics, a major part of GM's defense, aerospace, and communications business.
- KGB AGENT Shabtai Kalmanowich, now jailed in Israel, played a mediating role in a Soviet proposal to South Africa for cartelization of the platinum and gold markets. The October 1987 British Intelligence Newsletter related this to recent turbulent events in the tribal homeland of Bophuthatswana, which sits atop the world's largest platinum reserves. In return for agreement, Moscow promised Pretoria it would curtail black terrorist activities in the region. South Africa agreed after American sanctions.

EIRScience & Technology

Starpower: the quest for fusion energy today

How close are we to 'breakeven' in this unlimited source of energy? Concluding a 3-part series abridged from the Office of Technology Assessment's recent report.

Scientific progress and reactor design

Energy gain

An important measure of scientific progress toward attaining reactor-relevant conditions is energy gain, denoted as "Q." Energy gain is the ratio of the fusion power output that a device generates to the input power injected into the plasma. Input and output power are measured at some instant after the plasma has reached its operating density and temperature. In experimental plasmas that do not contain tritium and therefore do not produce significant amounts of fusion power, an "equivalent Q" is measured. It is defined as the Q that would be produced by the plasma if it were fueled equally by both deuterium and tritium (D-T) and if it had attained the same plasma parameters. . . .

Figure 9 shows the plasma temperatures and confinement parameters needed to obtain Qs of at least 1, a condition known as "breakeven." The plasma temperatures and confinement parameters that have been attained experimentally by various confinement configurations are also shown. No device has yet reached breakeven, although tokamak experiments have clearly come the closest.

Ignition

The most significant region in Figure 9 is ignition in the top right corner. An ignited D-T plasma not only generates net fusion power but also retains enough heat to continue producing fusion reactions without external heat. The Q of an ignited plasma is infinite, since the plasma generates output power without auxiliary input power from external

sources. (Power to drive the currents in the plasma and to cool the magnets to their operating temperature will be required even for ignited plasmas, but, as stated above, this power is not included in O.)

Successfully reaching ignition—or at least successfully generating a plasma that produces many times more power than is input into it—will be a major milestone in determining fusion's technological feasibility. The energy and the reaction products generated in a plasma producing appreciable amounts of fusion power will significantly affect the plasma's behavior. Understanding these effects may be crucial to utilizing self-sustaining fusion reactions in reactors, and these effects cannot be studied under breakeven conditions alone.

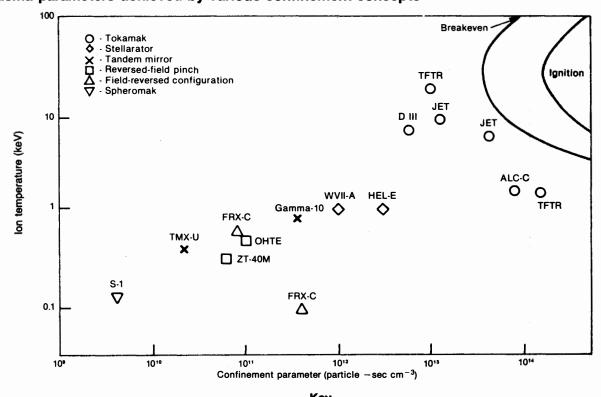
Breakeven

The breakeven curve in Figure 9 shows the conditions under which a plasma generates as much power through fusion reactions as is injected into it to maintain the reactions. Although reaching breakeven will be a major accomplishment, it will not have the technical significance of reaching ignition. . . .

The Tokamak Fusion Test Reactor (TFTR) at Princeton Plasma Physics Laboratory was designed to take advantage of beam heating. It is expected that breakeven-equivalent (breakeven conditions in a plasma not containing tritium) will be obtained sometime between fall 1987 and spring 1988. Experiments to realize true breakeven using tritium are scheduled for the end of 1990. These achievements will be important because, for the first time, a significant amount of heat from fusion power will be produced in a magnetic fusion device. Moreover, successful D-T operation of TFTR will provide important tritium-handling experience necessary for future reactor operation. . . .

FIGURE 9

Plasma parameters achieved by various confinement concepts



\$-1: Spheromak-1; Princeton Plasma Physics Laboratory, Princeton, N.J. TMX-U: Tandem Mirror Experiment Upgrade; Lawrence Livermore National Laboratory, Livermore, Calif.

ZT-40M: Toroidal Z-pinch, -40, Modified; Los Alamos National Laboratory, Los Alamos, N.M.

FRX-C: Field-Reversed Experiment C; Los Alamos National Laboratory, Los Alamos, N.M.

OHTE: Ohmically Heated Toroidal Experiment; GA Technologies, Inc., San Diego, Calif.

Gamma-10: University of Tsukuba, Ibaraki, Japan.

WVII-A: Wendelstein VII-A; Institute for Plasma Physics, Garching, Federal Republic of Germany.

HEL-E: Heliotron-E; Kyoto University, Kyoto, Japan.

D III: Doublet III; GA Technologies, Inc., San Diego, Calif.

JET: Joint European Torus; JET Joint Undertaking, Abingdon, United Kingdom. **TFTR:** Tokamak Fusion Test Reactor; Princeton Plasma Physics Laboratory, Princeton, N.J.

ALC-C: Alcator C; Massachusetts Institute of Technology, Cambridge, Mass.

Source: Office of Technology Assessment, 1987.

State of the art

Temperature and confinement. Figure 9 shows results that have been attained by each of the confinement concepts to date. Tokamak experiments have clearly made the most progress in terms of coming closest to the ignition region.

TFTR, in particular, has reached the highest temperature and confinement parameters of any magnetic fusion experiment. In 1986, TFTR attained ion temperatures of 20 kiloelectron volts (keV) or more than 200 million degrees C, well over the temperature needed for breakeven or ignition. However, these high-temperature results were obtained in a relatively low-density plasma having a confinement parameter of 10¹³ second-particles per cubic centimeter, which is about half the confinement parameter needed to reach breakeven at that temperature. The equivalent Q actually attained by the plasma was 0.23. Use of neutral beam heating under these

conditions reduces the breakeven threshold by almost a factor of four; a plasma heated to 20 keV without use of neutral beams would need a confinement parameter 7.5 times higher than was attained to reach equivalent breakeven.

In a separate experiment at a lower temperature of 1.5 keV, TFTR reached a confinement parameter of 1.5 × 10¹⁴ second-particles per cubic centimeter. Had this confinement been attained at a temperature of 20 keV, TFTR would have been well above equivalent breakeven, coming close to meeting the equivalent ignition condition. However, in practice, TFTR will not be able to attain temperature and confinement values this high simultaneously. Temperature can be raised at the expense of confinement, and vice versa, but the product of the two—which determines the equivalent Q—is difficult to increase. With additional neutral beam power and other improvements, TFTR may well be able to raise its equivalent Q from 0.23 to 1 and reach equivalent breakeven. However,

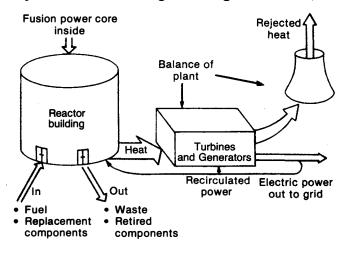
it is extremely unlikely that equivalent Qs much greater than 1 are attainable in TFTR.

Beta. The beta parameter, also called the "magnetic field utilization factor," measures the efficiency with which the energy of the magnetic field is used to confine the energy of the plasma. Beta is defined as the ratio of the plasma pressure to the magnetic field pressure. Record tokamak values for beta of 5%, in the PBX experiment at Princeton Plasma Physics Laboratory, and 6%, in the D III-D experiment at GA Technologies, have been attained. These results are especially important in that they generally validate theoretical models that predict how further improvements in beta can be obtained.

In a fusion reactor, the fusion power output per unit volume of the plasma would be proportional to beta squared times the magnetic field strength to the fourth power. Since tokamaks have relatively low betas compared to many of the other confinement concepts currently studied, improving the beta of tokamaks can be useful. . . .

Scaling. Understanding how tokamak performance can be expected to improve is crucial to evaluating the tokamak's potential for future reactors as well as to designing next-generation tokamak experiments. As mentioned earlier, the complete theoretical mechanism determining tokamak scaling has yet to be understood. Observationally, plasma confinement has been found to improve with increased plasma size. Empirical data also show that tokamak confinement improves when plasma density is increased, but that this behavior holds only for ohmically heated plasmas. Non-ohmically heated plasmas follow what has come to be known as "L(Low)-mode" scaling, in which confinement degrades as increasing amounts of external power are injected.

FIGURE 10 Systems in a fusion generating station



Source: Office of Technology Assessment, 1987.

A few years ago, experiments on the German Axisymmetric Divertor Experiment (ASDEX) discovered a mode of tokamak behavior described by a more favorable scaling, labeled "H(High)-mode." In this mode, performance even with auxiliary heating behaved more like the original, ohmically heated plasmas. However, H-mode scaling could be achieved only with a particular combination of device hardware and operating conditions. Subsequently, additional work at other tokamaks has broadened the range of conditions under which this more favorable behavior can be found. The challenge to tokamak researchers is to obtain H-mode scaling in configurations and operating regimes that are also conducive to attaining reactor-like temperatures and densities.

Reactor design

Just as an automobile is much more than spark plugs and cylinders, a fusion reactor will contain many systems besides those that heat and confine the plasma. Fusion's overall engineering feasibility will depend on supporting the fusion reaction, converting the power released into a more usable form of energy, and ensuring operation in a safe and environmentally acceptable manner. Developing and building these associated systems and integrating them into a functional whole will require a technological development effort at least as impressive as the scientific challenge of creating and understanding fusion plasmas. . . .

The overall fusion generating station (Figure 10) consists of a fusion power core, containing the systems that support and recover energy from the fusion reaction, and the balance of plant that converts this energy to electricity using equipment similar to that found in present electricity generating stations. Features that might convert fusion power to electricity more directly in advanced fusion reactors are described in a subsequent section.

Fusion power core

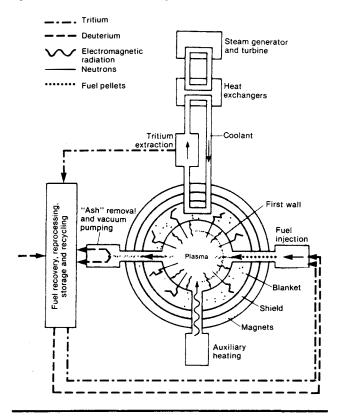
The fusion power core, shown schematically in Figure 11, is the heart of a fusion generating station. It consists of the plasma chamber, the surrounding blanket and first wall systems that recover the fusion energy and breed tritium fuel, the magnet coils generating the necessary magnetic fields, shields for the magnets, and the fueling, heating, and impurity control systems. Before an acceptable design for a fusion power core can be developed, the behavior of fusion plasmas must be understood under all conditions that might be encountered. Furthermore, significant advances must be made in plasma technologies which confine and maintain the plasma, and nuclear technologies, which recover heat from the plasma, breed fuel, and ensure safe operation.

Balance of plant

Balance of plant generally describes the systems of a fusion generating station outside of the fusion power core. In the example shown in Figure 11, the balance of plant resembles systems found in other types of electric generating sta-

FIGURE 11

Systems in the fusion power core



Source: Modified from "The Engineering of Magnetic Fusion Reactors," by Robert W. Conn. Copyright © 1983 by Scientific American, Inc. All rights reserved.

tions. These systems use heat provided by the fusion core to produce steam that drives turbines and generates electricity. The steam is cooled by passing through the turbines, and the remaining heat in the steam is exhausted through cooling towers or similar mechanisms.

More advanced systems that convert plasma energy directly into electricity also may be possible. Fusion reactors incorporating such systems could be made more efficient than those using steam generators and turbines.

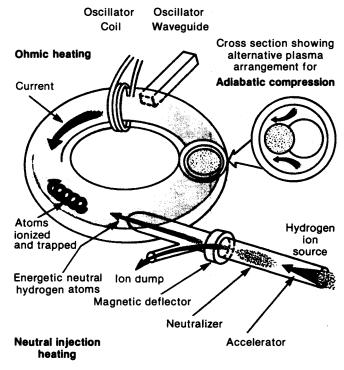
Fusion power core systems

The fusion plasma

At the center of a fusion reactor, literally and figuratively, is the fusion plasma. A number of supporting technology systems create and maintain the plasma conditions required for fusion reactions to occur. These technologies confine the plasma, heat and fuel it, remove wastes and impurities, and, in some cases, drive electric currents within the plasma. They

FIGURE 12 Plasma heating mechanisms

Radiofrequency heating



Source: Oak Ridge National Laboratory.

also recover heat, breed fuel, and provide shielding.

Further development of many of these plasma technologies is inevitable...but, with good confinement, the losses can be made up by external heating and/or by fusion self-heating. Different mechanisms for heating the plasma, illustrated in **Figure 12**, are listed below.

Ohmic heating. Like an electric heater, a plasma will heat up when an electrical current is passed through it. However, the hotter a plasma gets, the better it conducts electricity and therefore the harder it is to heat further. As a result, ohmic heating is not sufficient to reach ignition in many configurations.

Neutral beam heating. Energetic charged or neutral particles can be used to heat fusion plasmas. However, the same magnetic fields that prevent the plasma from escaping also prevent charged particles on the outside from easily getting in. Therefore, beams of energetic neutral (uncharged) particles that can cross the field lines are usually preferred for heating the plasma.

Radiofrequency heating. Electromagnetic radiation at specific frequencies can heat a plasma like a microwave oven heats food. Radiofrequency or microwave power beamed

into a plasma at the proper frequency is absorbed by particles in the plasma. These particles transfer energy to the rest of the plasma through collisions.

Compression heating. Increasing the confining magnetic fields can heat a plasma by compressing it. This technique has been used in tokamak devices and is one reason for studying the field-reversed configuration confinement approach. As stated earlier, there is hope that compression may be sufficient to heat an FRC plasma to ignition.

Fusion self-heating. The products of a D-T fusion reaction are a helium nucleus—an alpha particle—and a neutron. The neutron, carrying most of the reaction energy, is electrically uncharged and escapes from the plasma without reacting further. The alpha particle, carrying the rest of the energy from the fusion reaction, is charged and remains trapped with the confining magnetic fields. Hundreds of times hotter than the surrounding plasma, the alpha particle heats other plasma particles through collisions.

Status. Recent system studies show that radiofrequency (RF) heating offers significant advantages over neutral beam heating. Consequently, the U.S. neutral beam research program has been reduced while the RF heating program has grown. Various types of RF heating, using different frequencies of radiation from tens of megahertz (millions of cycles per second) to over a hundred gigahertz (billions of cycles per second), are under study. Each frequency range involves different technologies for generation and transmission.

Issues. Additional research and development (R&D) in heating technologies is essential to meet the needs of future experiments and reactors. Key technical issues in RF heating are the development of sufficiently powerful sources of radiofrequency power (tens of megawatts), particularly at higher frequencies, and the development of launchers or antennas to transmit this power into the plasma, particularly at lower frequencies. Resolution of these issues will require technological developments as well as improved understanding of the interaction between radio waves and plasmas.

Since no ignited plasma has yet been produced, the effects of fusion self-heating on plasma confinement and other plasma properties are not experimentally known. Confinement could degrade, just as it does with other forms of auxiliary heating. Although self-heating can be simulated in some ways in non-ignited plasmas, its effects can be fully studied only upon reaching high energy gain or ignition. The ignition milestone, therefore, is crucial to the fusion program, and understanding the behavior of ignited plasmas is one of the program's highest scientific priorities.

Fueling

Description. Any fusion reactor that operates in pulses exceeding a few seconds in length must be fueled to replace particles that escape the plasma and, to a lesser extent, those that are consumed by fusion reactions. Firing pellets of frozen deuterium and tritium into the plasma currently appears to be

the best approach for fueling. Both pneumatic (compressed gas) and centrifugal (sling) injectors have been used. Neutral beam fueling has been used in experiments, but fueling reactors in this way would take excessive amounts of power.

Status. Pellets up to 4 millimeters in diameter have been fired into experimental plasmas at speeds of up to 2 kilometers per second and at repetition rates of 5 to 40 pellets per second. U.S. development of pellet fueling technology, centered at Oak Ridge National Laboratory, is well ahead of fueling technology development elsewhere in the world. By building state-of-the-art pellet injectors for use on foreign experiments, the United States is able in return to gain access to foreign experimental facilities.

Issues. Reactor-scale plasmas will be denser, hotter, and perhaps bigger than the plasmas made to date in fusion experiments; moreover, reactor plasmas will contain energetic alpha particles. All these factors will make it much more difficult for pellets to penetrate reactor plasmas than plasmas made in present-day facilities. . . .

Current drive

Description. Several confinement concepts, including the tokamak, require generation of an electric current inside the plasma. In most present experiments, this current is generated by a transformer. In a transformer, varying the electric current in one coil of wire generates a magnetic field that changes with time. This field passes through a nearby second coil of wire—or in this case the conducting plasma—and generates an electric current in that coil or plasma. Varying the magnetic field is essential; a constant magnetic field cannot generate current.

In tokamak experiments, a coil located in the "doughnut hole" in the center of the plasma chamber serves as one coil of the transformer. Passing a steadily increasing current through this coil creates an increasing magnetic field, which generates current in the plasma. When the current in the first coil levels off at its maximum value, its magnetic field becomes constant, and the current in the plasma peaks and then starts to decay. If the fusion plasma requires a plasma current, its pulse length is limited by the maximum magnetic field of the first coil and the length of time taken for the plasma current to decay.

Status. Techniques are now being studied for generating continuous plasma currents, rather than pulsed ones, because steady-state reactors are preferable to ones that operate in pulses. Injecting radiofrequency power or neutral beams into the plasma might be able to generate such steady-state currents in tokamaks. The injected power or beams generate currents either by "pushing" directly on electrons in the plasma or by selectively heating particles traveling in one direction. Experiments have confirmed the theory of radiofrequency current drive and have succeeded in sustaining tokamak pulses for several seconds.

Some other confinement concepts, such as the reversed-

field pinch or the spheromak, can generate plasma currents with small, periodic variations in the external magnetic fields. Such current-drive technologies do not involve complex external systems. . . .

Reaction product and impurity control

Description. Alpha particles, which build up as reaction products in steady-state or very long-pulse fusion reactors, will have to be removed so that they do not lessen the output power by diluting the fuel and increasing energy loss by radiation. Devices that collect ions at the plasma edge can be used to remove alpha particles from the plasma. Alpha particles, when combined with electrons that are also collected at the plasma edge, form helium gas that can be harmlessly released. Unburned fuel ions also will be collected; these will be converted to deuterium and tritium gas, which will have to be separated from the helium and reinjected into the plasma.

The same devices that collect ions at the plasma edge help prevent impurities from entering the plasma. Even small amounts of impurities can cool the plasma by greatly accelerating the rate at which energy is radiated away.

Status. Two types of devices are being considered for these tasks: pumped limiters and divertors. A limiter is a block of heat-resistant material that, when placed inside the reaction chamber, defines the plasma boundary by intercepting particles at the plasma edge. A variant, the pumped limiter, combines a limiter with a vacuum pump to remove the material collected by the limiter. A divertor generates a particular magnetic field configuration in which ions diffusing out of the fusion plasma, as well as those knocked out of the vessel walls and drifting toward the plasma, are diverted away and collected by external plates. . . .

The fusion blanket and first wall

The region immediately surrounding the fusion plasma in a reactor is called the blanket; the part of the blanket immediately facing the plasma is called the first wall. . . . The blanket serves several functions. Cooling systems in the blanket remove the heat generated by fusion reactions and transfer it to other parts of the facility to generate electricity. . . . In addition, the tritium fuel required by the reactor is produced, or "bred," in the blanket. Furthermore, the blanket must support itself and any other structures that are mounted on it. . . .

A wide variety of designs have been proposed for the blanket and first wall. However, since the fusion research program has concentrated to date primarily on plasma science issues, relatively little experimental work has been done on blanket design or fusion nuclear technologies in general. . . .

The magnets

Description. The external confining magnetic fields in a fusion reactor are generated by large electric currents flowing through magnet coils surrounding the plasma. These magnets must withstand tremendous mechanical forces. . .

Superconducting coils lose all resistance to electricity when cooled sufficiently; below a temperature called the

TABLE 7 Fusion fuel cycles^a

Cycle	Primary reaction	Percent of energy carried by charged particles
D-T cycle	D+T→⁴He+n+17.59 MeV	20%
	[D = deuterium; T = tritium; 4He = alpha particle, or helium nucleus]	
D-D cycle	D+D→p+T+4.03 MeV	62%⁰
	D + D→3He + n + 3.27 MeV	
	[p = proton; ³ He = helium isotope with one less neutron than ⁴ He]	
D-3He cycle	D+3He→4He+p+18.34 MeV	up to 98%⁵
D- ⁶ Li cycle	D+6Li→5 different reactions	over 65%
	[6Li = isotope of lithium]	
p-11B cycle	p+11B→4He+4He+8.66 MeV	almost 100%d
	[11B = isotope of boron]	

Presented in order of increasing difficulty; the last reaction is from 100 to 10,000 times harder to ignite than the first one, depending on temperature. b62% is the fraction of the energy carried off by charged particles, assuming that the intermediate reaction products (T and 3He) react further via D-T and D-3He reactions. With these additional reactions, the full reaction is

⁶D→p+p+n+n+4He+4He+43.23 MeV. c98% can be attained for mixtures lean in D and rich in 3He...

dA low-energy (0.15 MeV) neutron is produced in the secondary reaction 4He + 11B→n + 14N + 0.158 MeV [14N = isotope of nitrogen].

Source: U.S. Department of Energy, Background Information and Technical Basis for Assessment of Environmental Implications of Magnetic Fusion Energy, DOE/ER-0179, August 1983, p. 2-3 (table 2.1) and pp. 2-24, including table 2.2.

critical temperature, their magnetic fields can be sustained without any additional power. However, power is required to establish the fields initially, and a small amount of refrigeration power is required to keep superconducting magnets at their operating temperature. . . .

Status. The first fusion device built with superconducting magnets was the Soviet T-7 tokamak, completed seven years before any Western fusion device using superconducting magnets. . . . The Soviets are now building T-15, a much larger superconducting tokamak. . . . The Tore Supra tokamak being built in France will also use superconducting magnets. . . . In the United States, MFTF-B was completed in 1986; its superconducting magnets have been successfully tested at their operating conditions. . . .

Issues. Recent discovery of new superconducting materials with critical temperatures far above those of previously known materials, and possibly with the capability to reach very high magnetic field strengths, will have a profound impact on a great many fields, including fusion. . . .

Advanced fuels

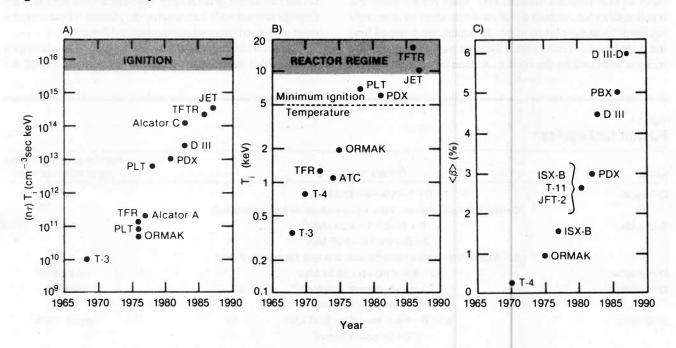
The fusion power core described in the previous section uses D-T fuel because it is by far the most reactive of all potential fusion fuels. This reactivity can be increased still further by aligning the internal spins of the deuterium and tritium nuclei, a technique known as *spin polarization*. If the spins can be aligned initially, the magnetic field of the fusion reactor will tend to keep them in alignment. Therefore, research is ongoing at Princeton Plasma Physics Laboratory to develop intense sources of spin-polarized fuel.

The principal disadvantage of D-T fuel is that the D-T reaction produces energetic neutrons that cause radiation damage and induce radioactivity in reactor structures. Moreover, reactors using D-T must breed their own tritium, substantially adding to reactor complexity and radioactivity levels. For these reasons, the possibility of using other fuels in fusion reactors is being investigated.

Fuels other than D-T require higher temperatures and

FIGURE 13

Progress in tokamak parameters



(A) n≅T, representing the simultaneous achievement of three parameters—density, ion temperature, and confinement time—needed to produce fusion power

(B) T_i = ion temperature
 (C) <β> = beta = ratio of plasma pressure to magnetic field pressure; provides a measure of the efficiency with which the magnetic fields are used

Source: Updated from National Research Council, Physicis Through the 1990s: Plasmas and Fluids (Washington, D.C.: National Academy Press, 1966), figure 4.6, p. 180.

Lawson confinement parameters to reach ignition and higher beta values to perform economically. Achieving these parameters will require stronger magnetic fields, higher plasma currents, and substantial improvements in other plasma technologies beyond those needed to reach ignition with D-T fuel—a task that in itself has not yet been accomplished. However, reactions that use advanced fuels would have a number of advantages:

- They would require little to no tritium, reducing or eliminating the need for the blanket to breed tritium and permitting a much wider range of blanket designs. Tritium inventories would be smaller and the consequent radioactivity levels would be lower.
- They would generate fewer and lower energy neutrons, alleviating radiation damage and minimizing radioactive wastes.
- They might permit the use of more efficient methods to generate electricity from fusion energy. In advanced fuel fusion reactions, more energy is released in the form of energetic charged particles, such as protons or alpha particles, than is the case in the D-T reaction. Therefore, these advanced fuels may be amenable to various techniques that generate electricity directly from the fusion plasma or from plasma-generated radiation without having to first convert the energy into heat. (See the following section on "Advanced energy conversion.")

Table 7 presents five fusion fuel cycles, including the "baseline" D-T cycle and four possibilities for advanced fuel cycles. Of the advanced cycles, the D-3He cycle is currently drawing the most attention within the fusion community. The primary reaction produces no neutrons, and neutrons resulting from corollary D-D reactions can be minimized by using a mixture consisting mostly of ³He or by using spin-polari-

However, the D-3He reaction is much more difficult to start than the D-T reaction. The minimum temperature required to ignite D-3He is several times higher than that needed for D-T; the minimum confinement parameter is about 10 times higher. Given that the requirements for igniting D-T have not yet been experimentally achieved, attaining conditions sufficient to ignite D-3He is considerably further off. On top of its technological requirements, ³He is scarce. It is an isotope of helium with one less neutron than natural helium (4He), and it occurs on Earth only as the end-product of tritium decay. The only way to collect ³He is to make tritium and wait for it to decay or to breed ³He as the product of another advanced fuel fusion reaction, the D-D reaction. Due to the scarcity of ³He, the D-³He reaction has been considered primarily an academic curiosity until recently.

Today, a resurgence of excitement about ³He comes with the discovery that it is found in substantial amounts in the uppermost layers of soil on the Moon. Analysis of Moon rocks brought back by the Apollo missions shows that ³He, which is constantly emitted by the Sun and carried by the

solar wind, is deposited and retained in the lunar surface. In principle, a rocket with the cargo volume of the space shuttle could carry back enough liquid ³He to generate all the electricity now used in the United States in one year. . . .

Advanced energy conversion

Despite the very high-level technology in the fusion core, a baseline fusion reactor would generate electricity in much the same way that present-day fossil fuel and nuclear fission power plants do. Heat produced in the reactor would be used to boil water into steam, which would pass through turbines to drive generators. Through this process, about 35-40% of the energy produced in the fusion reaction would be converted into electricity, with the remainder discharged as waste heat. This efficiency, roughly the same as that of fossil fuel and nuclear fission generating stations, is determined primarily by the process of generating electricity from the energy in the steam. Efficiency could be raised if advanced, high-temperature materials in the blanket and first wall of a fusion reactor permitted higher coolant temperatures to be used.

If the intermediate step of heating steam could be bypassed, a higher percentage of the energy released in fusion reactions could be converted into electricity. Several techniques to integrate generation of electricity directly into the fusion power core have been conceived. One of these, applicable to D-T reactors as well as to advanced fuel reactors, would convert energy carried off by escaping charged particles directly to electricity by collecting the particles on plates. This technique is most applicable to open confinement concepts, in which charged particles can be allowed to escape along magnetic field lines.

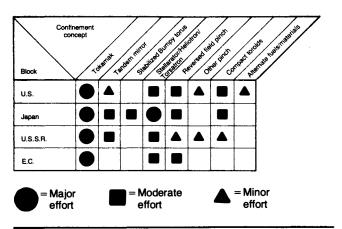
Other techniques, which can work with closed confinement concepts, require plasma temperatures significantly higher than the 10- to 15-kiloelectron-volt D-T ignition temperatures. Very hot plasmas radiate more energy away in the form of microwave radiation than cooler plasmas do, and it appears that this radiation could be captured at the first wall or in the blanket and converted directly into electricity. These "direct conversion" techniques would be better suited to advanced fuels, which not only burn at higher temperatures than D-T but also produce most of their energy in the form of energetic charged particles. Unlike neutrons, which escape from the plasma without heating it, charged particles are retained within the plasma. The D-T reaction, in which only 20% of the energy is given to charged particles, is less suitable for techniques that recover energy directly from the plasma.

Several direct conversion techniques that may convert well over 35% of the fusion energy to electricity have been identified. Until they can be tested experimentally under conditions similar to those in an advanced fusion reactor, they must be considered speculative. Nevertheless, they provide a tantalizing goal.

Research progress and future directions

In 35 years of fusion research, the technological requirements for designing a fusion reactor have become clearer, and considerable progress has been made toward meeting them. Improved understanding, based on both experiments and increased computational ability, is providing much of the predictive capability needed to design, and eventually to optimize, future plasma experiments and fusion reactors.

FIGURE 14 **Emphases of major programs on confinement** concepts, 1986



Source: Fusion Power Associates

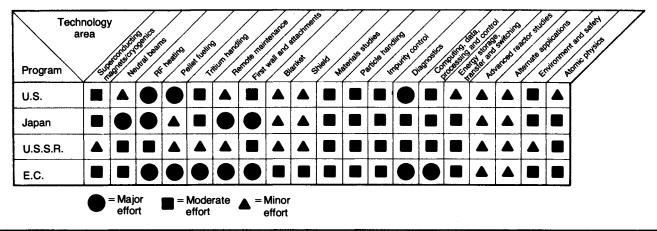
Major advances in plasma research have been made possible by progress in tokamak plasma technologies:

- By the 1960s, experiments demonstrated the crucial importance of attaining high vacuum and low impurity levels in the plasma to achieve high densities, temperatures, and confinement times.
- In the mid-1970s, neutral beam technology was first used to heat plasmas to temperatures several times higher than those previously attained. High-performance, high-field copper magnets were used to obtain high Lawson confinement parameters in compact tokamak plasmas.
- The development in the late 1970s of pellet injectors to fuel plasma discharges led to further advances in plasma density and confinement. Development of the poloidal divertor at about the same time led to the discovery of the "Hmode," a mode of tokamak behavior that was not subject to degraded confinement when auxiliary heating was used.
- In the early 1980s, advances in high-power radiofrequency technology gave experimenters new tools to modify the temperature, current, and density distributions within the plasma. Much of this new capability has yet to be exploited.

These accomplishments have contributed to the steady progress in plasma parameters plotted in Figure 13. Figure 13a shows the product of the temperature, density, and confinement time that has been achieved simultaneously in various experiments over the last 20 years. Since all three of these parameters must be high simultaneously for the product to be high, this product provides a rough measure of how well these three requirements have been simultaneously

Figure 13b plots the temperature alone and compares it to the minimum temperature below which neither breakeven nor ignition can occur no matter how high the density and confinement time. The TFTR point shows temperatures well

FIGURE 15 Emphases of major programs on technology development, 1986



Source: Fusion Power Associates.

into the reactor regime and far above that needed for ignition. However, the fact that the corresponding TFTR point in Figure 13a is below the ignition threshold indicates that high temperature is not sufficient; the product of density and confinement time must also be high for ignition.

Figure 13c shows progress in the parameter beta, the ratio of plasma pressure to magnetic field pressure. Note that devices that have achieved high values on one of the three plots often have not been the ones that have gotten the highest values in others. Future devices will have to achieve high values in all areas simultaneously. . . .

Probability of success. It seems likely that at the conclusion of the research program, fusion's technological feasibility—the ability to use fusion power to generate electricity—can be shown. The fusion program has made steady progress over the last 35 years on the key technical issues. It is still possible that fusion's scientific feasibility will be impossible to demonstrate, due to surprises in the behavior of a plasma that generates substantial amounts of fusion power. However, successfully attaining ignition in CIT [Compact Ignition Tokamak] will resolve most of the scientific uncertainties.

Most of the subsequent scientific and engineering challenges in designing and building a reactor have been identified. Once scientific feasibility is established, a concerted and well-funded research effort should be able to develop a reactor that produces fusion power. . . .

Comparison of international fusion programs

Comparing levels of effort among the international fusion programs is complex. Qualitative measures show that the programs are similar in direction and achievement, but these measures are subjective. Quantitative measures are more objective, but they may be distorted. Moreover, different techniques give different results. . . .

Qualitative comparisons show that the four major fusion programs are comparable in levels of effort and accomplishment and in their near-term research objectives, although the stated long-term goals and rationales for the programs differ (see **Table 8**). Three of the programs operate tokamak experiments of similar capability and complexity, and the fourth (the Soviet Union) is in the process of building a large tokamak of somewhat similar capability; each program also studies alternative confinement concepts. All of the programs recognize the need for a next-generation experiment during the mid-1990s to advance fusion technology and science

Figure 14 compares the programs' research and development emphases on confinement concepts, and Figure 15 compares their technology development efforts. Variations among programs are influenced by differing program con-

TABLE 8

Program goals of the major fusion programs

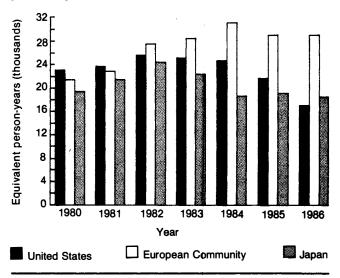
Program Goal	Rationale	
U.S.		
Demonstrate science and technology base for fusion power	Determine potential as an energy option	
EC		
Prototype construction	Develop energy option Promote industrial capability Strengthen political unity	
Japan		
Demonstration plant	Develop energy option Fulfill national project	
U.S.S.R.	,	
Fusion hybrid system	Support fission program	

centration, funding levels, technological capabilities, and program history. . . .

To correct for distortions from fluctuating exchange rates, DOE has used another method to compare fusion programs. In this method, the fusion budget of each program is divided by the average annual manufacturing wages prevailing in the country or region, with both values measured in local currency. The resulting value is a measure of the level of effort of each program in units of "equivalent person-years." Comparisons are shown in **Figure 16.**

FIGURE 16

Comparison of international equivalent person-years



Source: U.S. Department of Energy, Office of Fusion Energy, 1986.

EIRInvestigation

Noriega's accusations reopen Iran-Contragate

by Gretchen Small

Panama's problems with the Reagan administration began on Dec. 17, 1985, when Defense Force Commander Gen. Manuel Noriega and two other Panamanian military officers told National Security Adviser John Poindexter that Panama would not leave the Contadora Group, nor join the United States in training the Contras and invading Nicaragua, Noriega told CBS's Mike Wallace on Feb. 4.

The interview began on the subject of the U.S. Federal Grand Jury indictments against General Noriega. By its end, the broader strategic issues underlying the "get Noriega" campaign had been placed on the agenda: the Iran-Contra scandal, and U.S. policy in Central America.

The interview, and the wide coverage Noriega's charges against Poindexter were given, blew apart the operation to paint Noriega as a member of the cocaine-trafficking Medellín Cartel. Instead, on Feb. 8, as Senate hearings on Noriega opened, the news had broken that the indictment of Noriega was run by the same "parallel government" which had been caught selling weapons to Khomeni, and buying arms with the profits—even from the East bloc—to ship to Nicaraguan contras.

General Noriega charged that the indictments against him stem from his refusal to play along with the NSC's absurd Contra games. For several years, Noriega has organized throughout the region for the Central American militaries to take a larger hand in ending the crisis in the region. This role should include the formation of a Central American military body to advise the Contadora Group, and military action to assure economic policies which increase the well-being of the population, he has specified.

George Bush is evidently not happy with this turn of events. In a Portsmouth, New Hampshire speech on Feb. 11, "Bush vowed that he would not be 'threatened' by Noriega," the *Washington Post* reports.

Noriega hadn't mentioned Bush. Perhaps Bush, one of four standing members of the National Security Council, fears new questions that he would *Rather* not answer, on his knowledge of the dirty dealings of arms, drugs, and terrorists uncovered in the Iran-Contras scandal.

Bush will not long be able to continue ignoring the Iran-Contragate scandal. In an Oklahoma City press conference Feb. 10 and one in Dallas two days later, Democratic presidential candidate Lyndon H. LaRouche charged that the allegations against General Noriega were part of a cover-up to hide drug-smuggling by the Nicaraguan Contras. He added, that if the Reagan administration keeps pushing Panama, Noriega will expose everything he knows about Vice President Bush, the Contras, and links to drug-running and money-laundering.

The indictments are designed "to lower the people's morale so that they will not fight anymore, and that of the other Latin American leaders who will also not fight, because he who fights gets indicted," Noriega told CBS.

Indeed. LaRouche is another whom the Department of Justice has tried to teach that "he who fights gets indicted." LaRouche has reported that his legal problems began with his refusal to support the Reagan administration's Contra policy, and his proposals for a war on drugs—all the way up to the drug bankers.

Noriega's bombshell

Poindexter's threats on Dec. 17, 1985 were known to most Panamanians long before the Wallace interview. Nor were they news to U.S. senators. A U.S. Senate Staff delegation which visited Panama in November 1987 was briefed on Poindexter's "arrogant and threatening" demand that the Defense Forces "serve as the future 'spearhead' of a Nicaragua invasion force," reported the delegation's December 1987 Report on Panama.

But when Noriega's accusations against the Reagan administration's NSC were broadcast on CBS's 60 Minutes program on Feb. 7, the news could no longer be covered up.

In the Wallace interview, General Noriega, charging that the indictments against him on drug-trafficking charges were politically motivated—"a conspiracy forced by the Justice Department"—produced a thick sheaf of letters which the U.S. Drug Enforcement Administration had sent over the years, which praised Panama, and himself, for cooperating in the fighting drugs.

Quoting several of these on the air, Wallace asked: "Now that the U.S. Justice Department has indicted General Noriega, does John Lawn [administrator] of the DEA want to retract his praise for Noriega?" He answered his own question: "Not at all. When we spoke with him on Friday, he said he stands by everything he wrote. So here is something to contemplate: On the day the Justice Department brings General Noriega to trial, should that day ever come, one of Noriega's best defense witnesses could well be the DEA's own John Lawn."

Why did Noriega think he was being gone after? Noriega reported on his 1985 meeting with Poindexter. "He said he was coming on Reagan's behalf. He said Panama and Mexico were acting against U.S. policy in Central America, because we were speaking of peacefully solving the Nicaraguan crisis, and that was not good for the Reagan administration's plans. The only thing that will save us from being hit both politically and economically by the U.S. would be if we allowed the Contras to be trained in Panama in their fight against Nicaragua."

"He—Poindexter told you that, that you would be hit economically, if you failed to rein the Contras here in Panama?" Wallace pressed. "Panama would be affected economically. Their interest was for us to help the Contras, and we told them 'no,' "Noriega replied.

"Then, General Noriega dropped a bombshell. He said that Admiral Poindexter told him that the U.S. was planning to invade Nicaragua," Wallace reported. "Yes, they were going to hit Nicaragua. They were going to invade Nicaragua. And the only reason they hadn't done it was because Panama was in the way, and that all they wanted was Panama to get out of the way, and allow them to continue with their plans," Panama's general replied.

Captain Cortiso, Noriega's aide who attended the meeting with him, confirmed the report: "They wanted Panama forces to go in with American forces, but we'd go in first. Then we'd get the support from the American troops that would be taking part in the invasion."

Poindexter's former assistant, Norman Bailey, was the man who tried to recruit Panamanian officers to the Reagan administration's Contra plan, Noriega added.

There was also a hint that more than the Contra scandal may come to light before the end of this affair. Noriega reported that Panama is preparing to "show how politicians in the United States have been covering up for lawyers, bankers, and even Panamanian politicians who are involved in drug trafficking."

U.S. vs. Ibero-America?

The expectation was that the indictments of Noriega would either force him to resign, or, believed more likely, split the PDF, and trigger an uprising against General Noriega. Gabriel Lewis Galindo, the multimillionare who runs the opposition from Washington, issued a radio appeal on Feb. 6 to the middle-level officers, name by name, to overthrow Noriega. The high point of his pitch was directed at Maj. Armando Palacios Góndola, an officer, said Lewis Galindo, who "is on the list of those people respected by Panamanians like me."

Major Palacios Góndola's answer was given on Feb. 8, when he read the communiqué of the PDF's middle-level commanders in support of Noriega (see *Documentation*.)

So, it is proposed in Washington that "force" be used against Panama. On Feb. 12, the Washington Times editorialized that the United States must make "prudent use of diplomacy, and (if necessary) force, in order to ensure Panama's freedom—and General Noriega's departure." Similarly, the Baltimore Sun proposed that President Reagan must "do whatever is necessary to get rid of General Noriega and the corrupt officials around him." The Sun's editorial implied perhaps that Panamanian Contras should be formed.

Such schemes are dangerously foolish. The reaction in Panama already has been overwhelmingly one of support for the government and military. Washington has, once again, misestimated the power of nationalism. In Panama, the U.S. indictment is viewed as an attempt to retake the Canal, and deny Panama its sovereignty.

"This is not a problem of a man, of a name; this is a problem of a people, of a state, of a nation, and of a cause," Noriega told a Democratic Revolutionary Party dinner Feb. 6. "Man's true life on Earth is to be born, to produce, and to die. . . . There are those who are only born and then die." Our job, he said, is "to produce a fatherland, to produce achievements, and to produce things that contribute to the continuation of life."

At a rally in Santiago de Veraguas on Feb. 9, Noriega accused the United States of seeking to use "weak governments and men...traitors...who can...live under the shade of tainted money that comes from their betrayal." He added: "I have heard the U.S. State Department, Elliott Abrams, and others say the solution is Noriega's ouster or death. They are wrong... because no generation will permit any traitors... to pawn the generation that will take over the country in the year 2000."

The issue is not merely a national one. "A Peronist group from Argentina once told me that Panamanians did not realize the role we were playing in history," General Noriega stated in his speech to the PRD. Middle-level officers were with me at a meeting in Mar del Plata where we, the Argentines and Panamanians, concluded that "here in Panama we were waging, and we are going to wage, the last battle of Latin American dignity against colonialism."

Documentation

Norman Bailey on getting rid of the Defense Forces

Since September 1985, former U.S. National Security Council member Norman Bailey has functioned as case officer in the campaign against Gen. Manuel Noriega. Excerpted below is a speech by Bailey given on Dec. 8, 1987 at a George Washington University forum, "Crisis in Panama," where he specifies that the goal of the war is not to oust General Noriega, but to "get rid of" the institution of the Defense Forces itself.

Bailey's protestations against money laundering through the offshore banking center in Panama are almost humorous. Not only has Bailey long been a vociferous advovate of regulation-free financial activities worldwide, but, as he admits, his campaign against Panama's military was begun on behalf of "his friend, Nicky Barletta"—the man who ensured Panama's offshore center would be "more secret than Switzerland."

I first got involved in the Panamanian situation when I was chief economist in the NSC and one of the things we were trying to do was to trace currency movement having to do with arms trafficking and drug trafficking. . . . I soon discovered that Panama is one of the easiest places to trace currency movements, in terms of the total quantities involved—not in terms of who the money belongs to and so on—for the simple reason that Panama does not have a Central Bank, and it does not have its own currency. It uses the U.S. dollar as currency. . . .

At the same time, that this was going on—this investigation on our part—I became friendly, through my general interest in Latin America, with Nicky Barletta. Later he was elected President of Panama, and later he was thrown out. That made me mad. I don't like my friends being treated this way. So, I decided that I was going to do something about it. . . .

The case was taken all the way up to the National Security Adviser, who at that time was Admiral Poindexter. He went down to Panama and read the riot act to Noriega. . . .

About eight months ago, there was a conference at American University similar to this. . . . When the panel was over, the Chairman said, "Dr. Bailey, is there something you want to say before you leave?" And I said, "Well, the only thing I really want to say is that nothing is going to happen in Panama, and you are not going to get rid of Noriega, or the

institution of the PDF, unless the people of Panama go out in the streets, and subject themselves to being beaten up, and wounded, and perhaps killed. And that is not going to do any good, unless you got television out there, taking a picture of the people getting beaten up, and wounded and killed, because... nobody is going to know about it, no one is going to care. But if they are there, and it appears on prime television in the United States you are going to get some action."

Since that time, I sometimes have been accused of arranging Colonel Díaz Herrera's change of heart. I just want to say that there is no truth whatsoever to the rumor, I have not even met Colonel Díaz Herrera.

Getting rid of Noriega is not all that important. Getting rid of the system is what is important. Getting rid of the institution is what it's important. Getting rid of the fact that Panama is the most heavily militarized country in the Western Hemisphere, that's what is important. Without exception, it's much more heavily militarized than Chile . . . than Cuba. . . .

All of what I said is well known. There was a very good series of articles in the *New York Times* in 1986, detailing all of this, and they were 98% true as far as I know. Quite a bit came from me, so it better be true. . . .

Noriega is a pimple in the face of humanity. He should be given about as much importance as you would give to a pimple on your face. The cancer that it's eating out the body politic in Panama is a system of militarized control of the body politic, economic and social—that's what needs to be treated and cut out. You take care of a pimple with a pin; you take care of cancer with all kinds of very careful and very technical treatment.

In the first place, you do have to get rid of him. Secondly, you establish a Civilian Junta which declares that it is going to hold local elections, after several months, then congressional elections, and finally presidential elections—in a period no more than one year maximum. It's a very bad idea to stretch this thing out. It might be that one of the members of the Junta might be the Archbishop. . . representatives of the democratic party, a mix of people. Maybe a junta of five people.

In the meantime, the Civic Crusade has to maintain their activity and pressure, the worst possible thing for them to do is to disperse, to disband. . . . The PDF have got to realize that if they resist being reduced in size, being taken out of all the civilian functions . . . that the people will be back out in the streets. . . .

Panama's military responds

On Feb. 8, the middle-level commanders and officers of Panama's Defense Forces (PDF) issued a communiqué in

response to the indictments against Gen. Manuel Noriega. That communiqué, excerpted below, quashed hopes that the indictments would trigger a split in the Defense Forces.

Whereas the middle-level commanders and officers are the guarantors of the generational change of command, of discipline, honor, and loyalty to the institution:

- 1. Whereas the Panamanian nation has been subjected to ruthless political and economic aggression by the United States;
- 2. Whereas the PDF has been the chief target of this aggression, especially our commander in chief, General Manuel A. Noriega, and top PDF officers. The purpose is to break the unity within the institution and to prevent the generational struggle to achieve our national objective, that is, to regain total sovereignty in the year 2000.
- 3. Whereas bad Panamanians, including two retired officers harboring unbridled ambitions of power, have joined in this campaign against the Panamanian nation by inciting the PDF to rebellion.
- 4. Whereas, the objectives of this aggression are to ignore the Torrijos-Carter Treaties so as to extend the permanence of U.S. bases and troops beyond the year 2000 through the Southern Command; to force Panama out of the Contadora Group; and to use the PDF as an instrument of Washington's war policies in Central America.
- 5. Whereas the national government and the Panamanian people and their PDF have flatly rejected the plans by the United States and their local lackeys.

We resolve:

- 1. To maintain the solid unity of the PDF in view of this aggression and reject the call to rebellion by traitors who sell out their fatherland.
- 2. To reject the meddling of civilians in PDF internal affairs and its organic and hierarchical life, except for those civilians who are constitutionally entitled to do so. The PDF is a professional and disciplined institution; its men are part of the Panamanian people who have been attacked.
- 3. We reaffirm our loyalty oath to the fatherland and the institution.

We have maintained and will continue to maintain our strong support for our commander in chief, Gen. Manuel Antonio Noriega, and his general staff in their struggle for the country's sovereignty and independence; for their projects furthering the PDF's professional development; and for the legitimate demands by the people.

We respectfully ask President Eric Arturo Delvalle that

the U.S. Southern Command be withdrawn from our territory as its presence is not included in the Torrijos-Carter Treaties and annexed agreements. Its presence serves only the interest of projecting U.S. military power in the hemisphere, and meddling in the domestic affairs of friendly nations to the detriment of the good relations that exist between Panama and those countries, and in violation of the Neutrality Agreement of the Panama Canal.

We respectfully request our commander in chief and his general staff to authorize us to publicly defend our institution from the slander and libel to which it has been subjected. . . .

General Noriega exposes U.S. secret government

What follows are excerpts from Noriega's speech following the reading of the PDF statement at military headquarters.

Gentlemen: The U.S. strategy of war and maintaining its presence and its power has historically used different methods. Teddy Roosevelt used his Big Stick policy. . . . He imposed a treaty which all of us regretted and continue to regret. Afterward, the U.S. went on to use gunboat diplomacy during the Howard Taft administration to impose on the banana republics men who were docile to its strategy of power and submission. Later, they used Hoover's Iron Fist policy. The Marines could land on the beaches of those governments that did not agree with or follow the policies of that sphere of power. . . .

Adjusting its behavior to the evolution, maturity, and awareness of the Latin American peoples, the United States cannot continue using the policy of invasion, the Big Stick policy or the Iron Fist policy. . . . Therefore it became necessary to implement another form of aggression, which is more subtle, less open, and more creative. That is diplomacy through the legal system—by trial. They want to set a precedent in Panama for diplomacy by trial as a system so that no other Latin American leader can rise up to discuss, fight, and present his viewpoints because he, too, would then be put on trial. . . .

On Dec. 12, 1985—note the year, there were no problems-Poindexter arrived in Panama. He was aggressive, violent, and tried to impose rules for the game; he tried to subjugate the Republic of Panama. He tried to prevent our presence as a peace force in the Contadora forum; our presence as an armed force in search of a balance; a neutral armed force in search of peace. That language set a very bad example—in quotes, a very bad example—and could not be accepted. . . .

Poindexter was upset when he left. He left with a battle axe, which is what we are paying for now. . . .

José Blandón: paid to lie

by Catalina Metzler

Two days after Gen. Manuel A. Noriega, commander of the Panama Defense Forces, was indicted by a Miami grand jury on trumped-up charges of drug trafficking and money laundering, the U.S. Senate scheduled hearings on Panama to keep up the momentum of a massive media campaign against the general. The four-day event Feb. 8-11, staged by the Senate Foreign Affairs Subcommittee on Terrorism, Narcotics, and International Operations, was meant to be Noriega's trial in absentia. The media were the "jurors."

Noriega's attorneys asked to be allowed to cross-examine the witnesses, but subcommittee chairman John Kerry (D-Mass.), refused to allow it, saying that the hearings were not a trial. He issued an "open invitation" to the general to come to testify.

Aside from New York County District Attorney Robert M. Morgenthau and Gen. Paul Gorman, the witnesses were either criminals or Noriega's political enemies. These included Leigh Ritch, Floyd Carlton, and Ramón Milian Rodríguez, all three convicted of drug crimes in American courts.

But the "star witness" was José Blandón, the former Panamanian consul general in New York fired by the government of Panama after it was discovered that he was conspiring with the U.S. State Department to oust Noriega. His nine hours of sworn testimony produced startling charges that made front-page headlines for most of a week. But before that week was out, many were not believing him.

Credibility questioned

It took a while for the media to digest the manic statements by Blandón, who had to be "slowed down" by Senator Kerry on several occasions. But almost as quickly as he made his wild charges, his credibility as a "most reliable source" began to shred.

Knowledgeable sources believe that Blandón was a CIA mole planted in the Panamanian government long ago, available for use "at an appropiate time"—and this was that time. Other sources suggest that, like Nicaraguan defector Maj. Roger Miranda, Blandón was a paid defector, hired by the U.S. government as a last resort in the effort to oust Noriega.

In an interview shown on Panamanian television in Au-

gust 1987, Blandón had stated there were no Panamanian officials involved in drug trafficking or money laundering. At the time, Blandón had called the charges against Noriega and Panama "fabrications" by the "secret government" within the Reagan administration. He singled out former National Security Adviser Adm. John Poindexter and fired NSC staffer Lt. Col. Oliver North as the sources of the campaign against Noriega. But now, Blandón had changed his story 180 degrees.

Not even the Times believes him

Ray Takiff, one of Noriega's attorneys in Miami, simply dubbed Blandón's testimony "ridiculous." "The man is a liar," Takiff said, and charged that Blandón was being handsomely paid by the U.S. government for his testimony. "He is an opportunist, and this is his opportunity."

Blandón is indeed a liar, but not a very professional one. His "story" is so full of contradictions and accusations in all directions that, by the second day of his testimony, U.S. agencies, including the CIA, and individuals whose names had cropped up, began to question his reliability. Even the New York Times, the newspaper which launched the massive disinformation campaign against Noriega back in July 1986, felt compelled to call into question Blandón's credibility.

"On a number of sensitive issues, Mr. Blandón's public statements in different places have appeared inconsistent," wrote the *Times* on Feb. 11, lamely observing that most of what he said "is from memory." The paper quoted a Senate staff member saying, "There's been a lot of heat on him."

The coaches

The heat has come from his coaches, who have told him, as the *New York Times* reported, what to say and what not to say. Interestingly enough, according to the *Times*, Blandón was urged not to bring up allegations about drug trafficking by elements of the Honduran military. *EIR* has exposed the Reagan administration's cover-up of Honduran drug connections for fear that the truth about the Honduras-based Contras' ties to drug trafficking would come out into the open.

"Before his testimony," the *Times* reported, "some administration officials urged people who know Mr. Blandón to advise him to focus his testimony on General Noriega's crimes and not on other issues. . . . Last Sunday, for example, William G. Walker, Deputy Assistant Secretary of State for International Affairs, telephoned Gabriel Lewis Galindo . . . and advised him that Mr. Blandón would be most effective as a witness if he concentrated his testimony on Panama. 'He mentioned at some point that we are going to lose the focus on Noriega if he discussed all the other issues he knows about,' said Mr. Lewis, who relayed the message but denied that he pressured Blandón to alter his testimony."

Like Gabriel Lewis Galindo, the godfather of the Washington-based "Civic Crusade," anti-Noriega operation, Blan-

dón is being run by Dr. Norman Bailey, the Eastern Establishment's "behind the scenes" case officer for the campaign against Noriega. From the Senate side, the key players are Alfonse D'Amato (R-N.Y.) and Deborah DeMoss, Sen. Jesse Helms's (R-N.C.) staffer for Central America.

Blandón's lack of credibility became a matter of concern for the senators running the show. "Publicity people would try to do anything to discredit the testimony of Mr. Blandón," D'Amato told the subcommittee and the press Feb. 10, after several reporters raised the issue of the inconsistency in Blandón's statements. Blandón's fairy tale that he had seen documents with "CIA" and "National Security Council" letterheads "marked classified," with information on the "private lives" of several senators, created such an uproar that D'Amato went on national television to defend his star witness. The CIA is precluded by law from spying on U.S. citizens in the United States. In addition, making the information available to foreign countries would be another violation of U.S. law.

Appearing on ABC's TV program "Nightline" Feb. 9, Senator D'Amato told the American people that Blandón had no reason to lie. ABC's Ted Koppel told D'Amato that if Mr. Blandón were to be caught telling one lie, it would discredit his entire testimony.

The next morning, subcommittee chairman Kerry reminded Blandón that he could still "change his testimony if you feel something is not accurate." Blandón responded by reiterating every one of the allegations, including the one on the CIA, which the Agency vigorously denied. Kerry then insisted that Blandón was an "extraordinarily credible witness," and a "distinguished public servant" who is risking his life and that of his family by testifying. "No one has ever alleged he is making money," Kerry said.

Echoing the CIA

Blandón's testimony was also questioned on his allegations against Lyndon H. LaRouche.

Blandón testified, under oath, that LaRouche had in effect destroyed the "Blandón Plan," a State Department plan for Noriega to voluntarily resign in return for immunity from prosecution. Blandón claims that Noriega asked him to draw up the Plan.

Blandón testified that LaRouche was in the pay of Noriega. "Mr. LaRouche works for Mr. Noriega," he said. Elaborating, Blandón said, "Mario Parnther is a member of a political group in Panama who came to the U.S. to make a presentation in favor of Lyndon LaRouche." Parnther is a Panamanian lawyer and a leader of Panama's ruling Democratic Revolutionary Party, who testified before the Commission to Investigate Human Rights Violations in the United States in September 1987. The commission was studying the political vendetta being carried out against LaRouche and associates.

Blandón continued, Parnther "spoke to me about the role of Lyndon LaRouche with respect to Panama and that he, Mario Parnther, met with LaRouche in Boston, and on his return he spoke to me in New York. That was last year, and he is the young man who Noriega used as a witness in a meeting of the Joint Chiefs of Staff to talk about my activities in the United States."

Blandón blamed Parnther—indirectly, LaRouche—for having changed Noriega's position on the Blandón Plan.

But in his testimony the next day, Feb. 10, he did not blame LaRouche, but the Medellín Cartel of cocaine traffickers for destroying the Blandón Plan. He now said that the Medellín Cartel did not want Noriega to withdraw from his position and gain immunity, because "he knows too much." Therefore, they vetoed his plan.

Blandón's lies on the *Pia Vesta* affair, the Danish ship caught by Panama in 1986 with a large cargo of East bloc arms, prompted the *New York Times* Feb. 11 article questioning his credibility. Blandón had told the *Times* Feb. 4 that he believed General Noriega's version, that Lt. Col. Oliver North planned to use the *Pia Vesta* affair to make it appear that the Sandinistas were shipping East bloc weapons to the Salvadoran guerrillas. But *EIR* established that the *Pia Vesta* cargo was arranged by North, and was to be delivered to the Contras via El Salvador.

Kerry asked Blandón for his "personal opinion" on whom the weapons were going to. Blandón said he believed they were going to the Peruvian Navy—the cover story put out by CIA at the time. But the same Blandón had told Kerry and his staff in closed sessions that he believed Noriega was telling the truth in pinning the shipment down to North.

No evidence seen by military

Blandón's wild charges were echoed by three convicted criminals. But not by Gen. Paul Gorman's testimony. The head of the U.S. Southern Command from 1981 to 1985, Gorman told the subcommittee that he saw no evidence of Noriega's drug ties. He said he had "rumors" and "reports from second and third parties," but no real evidence. He added that the first time he saw "documents" linking Noriega to "money laundering" was in 1986 when he was part of the President's Commission on Organized Crime.

Gorman took the opportunity stress the crisis in Colombia where, as he put it, the drug mafia is threatening the very survival of that nation. He called for a "long-term comprehensive strategy" against drugs in the Western Hemisphere and complained that the Pentagon refuses to see the drug threat as a U.S. national security issue. Gorman criticized the Department of State for ordering U.S. ambassadors in Colombia and other nations to discourage those countries' militaries from engaging in the fight against drugs. The State Department's argument is that an active military "threatens" democracy. Drugs don't, evidently.

FIR Feature

Creativity and curriculum in the emerging age of nonlinear physics

by Lyndon H. LaRouche, Jr.

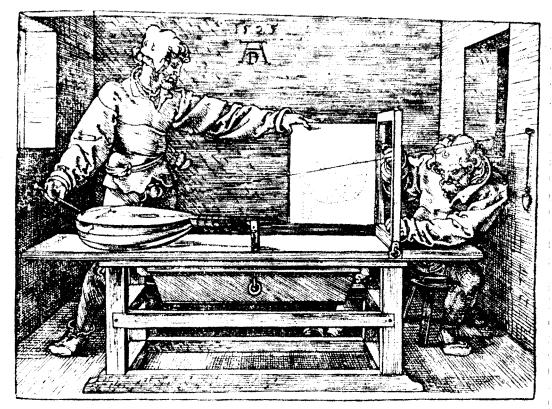
The worst of the evil done to Western civilization by the professed malthusians Charles Darwin and Thomas Huxley, was that they degraded mankind implicitly to the moral condition of the beasts. Out of this has come the academic popularity of such absurdities as the attempt to derive a human psychology from the study of behavior of animals.

Kindred views have affected the shaping of policies of education, to the effect of a downgrading of the primary mission of secondary education: the development of the distinctively human potentialities of the adolescent to the highest possible level of general capability for successful adaptability to both the foreseen and unforeseen challenges of adult life.

My purpose here, is to make clear why, unless we return to the principles of classical secondary education, the next two generations of pupils will generally lack the ability to cope successfully with the new forms of technological and other challenges presented—in higher education and adult life generally—during the remainder of this century and the early decades of the next.

To show that connection clearly, two general points must be explained. We must define rigorously what the term "creativity" signifies, and show the rather unique way in which classical education fosters the student's potential for creative thinking. We must examine also the new way in which emerging technological and other developments challenge the student's and adult population's potentials for such creative thinking. First, I state my specialized qualifications for treating these subject-matters.

By profession, I am a specialist in physical economy, a branch of physical science founded by Gottfried Leibniz. In the simplest aspect, this treats the relationship between the amount of usable energy supplied to society, per capita and per square kilometer of land-area used, and the potential rate of increase of the productive powers of that society. In the second degree, it examines the relationship between the way in which the internal organization of powered machinery, and analogous means, increase the potential productivity per unit of usable energy consumed. The second aspect of the study of physical economy, is the meaning



Albrecht Durer's "Demonstration of Perspective," from his treatise on geometry, 1525. The children shown on the front cover. of this magazine are learning the scientific principles which the Renaissance artists developed, and which hold the key to the scientific breakthroughs that lie ahead. Yet in the age of "New Math," these principles have been abandoned in our schools.

which Leibniz supplied to the German and English terms "technology," and to the French and Italian translations of this, "polytechnique."

My collaborators and I have contributed to the progress of work in this profession, as any professional should. My original contribution to the field has been made in connection with the generation of more advanced forms of technology by the creative processes of the human mind. My narrow objective has been to show how an intelligible representation could be provided for those mental-creative processes by means of which the individual effects, and assimilates a valid fundamental discovery in physical science.

By aid of such representations, it has become possible to show a cause-effect relationship between mental-creative activity and increase of the potential productive powers of labor.

We publish here Part I of a two-part policy paper released by the LaRouche Democratic Campaign on Feb. 5. The document was introduced by the following memorandum:

To: Those concerned with secondary education Subject: Creativity and secondary curriculum

From the establishment of the Brothers of the Common Life, through the Humboldt reforms of the nineteenth century, the development of an improved approach to secondary education has provided Western civilization numerous among its best adult minds. In this and other ways, such programs have made possible successful democratization of the processes of representative government, and have greatly facilitated many other benefits of which our Western civilization should be proud.

During the course of the present century, especially since approximately 1963, the quality of both public and university education has been systematically eroded through such influences as those of John Dewey and his more radical successors. The most recent erosion in this direction has greatly undermined all aspects of both popular life and representative self-government.

Now, technology progress presents us with the challenge of an age of nonlinear physics and biophysics. Without a return to classical standards of secondary education, our labor-force will be underqualified to meet the challenge. Without subtracting anything from earlier arguments for classical education, I add the current challenge as my point of emphasis.

Sincerely Yours, Lyndon H. LaRouche, Jr. By aid of these studies, one can demonstrate from the internal evidence of the work of Leonardo da Vinci, for example, or the compositions of Bach, Mozart, and Beethoven, that the quality of greatness in artistic composition flows from the same creative processes of mind generating valid fundamental discoveries in physical science.

The quality of natural beauty, with which all classical fine art begins, is harmonic orderings congruent with the principle of the Golden Section of isoperimetric (e.g., circular) action. The mathematical physics of Karl Gauss et al. shows the claims of such as Plato, Luca Pacioli, Leonardo da Vinci, and Johannes Kepler to have been correct on this point. From the modern vantage-point in physics and biophysics, we are able to show that what these forebears identified to be the principle of natural beauty, coheres with the most fundamental aspect of universal physical laws: what is termed the "curvature" of physical space-time, as such "curvature" is defined in the terms of reference of the Gauss-Riemann complex domain.

The important point to be added, respecting classical fine art, is that, although no work of art is sound if it violates the harmonic principles of natural beauty, the mere imitation of the beauty of nature, however perfect the copy, is not art.

Classical art never violates natural beauty; but that which distinguishes it as art, is that the creative powers of the artist's mind supply a crucial added element to the domain of natural beauty. This added element orders the artistic work as a human composition. That which thus orders the process of artistic composition, is a product of the same mental processes, engaged in the same form of activity responsible for the generation and assimilation of valid fundamental advances in scientific knowledge.

From the standpoint of the creative powers of mind, science and art form a unity. The view of classical Athenian art and Socratic method, as exemplified by St. Augustine on this subject, is the root of Western European classical culture. That Augustinian view, as reaffirmed by the greatest minds of the Golden Renaissance, is the foundation of classical humanism.

By "classical humanism," we signify a viewpoint which is opposed in every respect to the so-called "secular humanism" of both Romanticism and modernist philosophical radicalism.

Classical education, as this term should be understood to apply most emphatically to secondary curricula, signifies those facets of education which bear directly upon the employment and development of such creative potentials. We use the term "classical education" here, to signify not only the study of valid fundamental discoveries in physical science and the classical fine arts, but also history studied from this same vantage-point.

My undertaking in this report, is to render intelligible the most crucial features of a classical form of secondary education, and also to indicate the reasons why a return to the standpoint of classical humanist education is indispensable to qualify adolescent youth for meeting the challenges of the emerging age of nonlinear physics and biophysics, both in higher education and in life generally.

1. Classical humanism

What is called the Golden Renaissance, or, more commonly, simply "The Renaissance," presented the case for classical humanism on Christian religious grounds. The best example of this is the leading role of Cardinal Nicolaus of Cusa, one of the architects of the 1439 Council of Florence, and, during the later period of his life, chief canon of the Papacy. Cusa was also the founder of modern physical science, beginning with such books as his 1440 *De Docta Ignorantia* (*On Learned Ignorance*). In physical science, Cusa's followers include Luca Pacioli, Leonardo da Vinci, Raphael and his school, Johannes Kepler, and, in matters of scientific method and principles, Gottfried Leibniz.

Under our law, all arguments for public policy must be presented from an ecumenical standpoint, which does not depend upon any the peculiar doctrines of any religious denomination. Since we are all Augustinians by heritage, including Ashkenazi Judaism's followers of Philo Judeaus, the secular standpoint within all nations of Western European civilization, including our own, is consistent with that ecumenical Judeo-Christian framework of religious and moral belief. Happily, as the case of Nicolaus of Cusa illustrates the facts of the matter, we can state the case for classical humanism effectively from the standpoint of reference of physical science, as I do here.

The simplest, most direct proof of the principles of classical humanism, is made along the following lines.

According to modern anthropologists, the early condition of human society is what they term a "primitive hunting and gathering society," an echo of the cultural life of troops of chimpanzees or baboons. Anthropologists have shown us numerous cases, in which cultures have degenerated from a relatively higher state into forms of life with some resemblances to such a "hunting and gathering society." We avoid the speculative arguments of the anthropologists on these matters; we accept the observation that a hunting and gathering society is the lowest form into which human existence might fall. To that degree, with no other assumptions attached, the example is a useful one for our purposes here.

My colleagues and I have used our professional skills in physical economy to conduct studies of the economy of such a hunting and gathering society. The calculations are as follows.

If we presume wilderness conditions to prevail throughout our planet many thousands of years ago, we know that approximately 10 square kilometers of average land-area would be required to prove the bare biological subsistence of the average human individual. We know that, under these conditions, the life-expectancies of those individuals would be significantly less than 20 years of age. The level of culture would be that of a clever sort of baboon, a human culture which compensates in cleverness for the superior relative strength of the baboon. The maximum level of the human population on this planet, under such conditions, would be approximately 10 million living individuals.

Presently, there are more than 5 billion individuals existing on this planet. Did we use even existing levels of modern technology fully, we could sustain a population of approximately 15 billion persons at a higher standard of living than that prevailing in Western Europe and North America during the earliest 1970s. Three lines of current advance, high-energy plasma physics, coherent electromagnetic pulses, and optical biophysics, represent potentially the highest rate of increase of humanity's productive population-potential in the history of our species. By aid of these technologies, we might assuredly begin mankind's colonization of other planets within about 50 years.

We have good estimates of the population-density of our species during the past thousands of years. For example: From studies of the urban civilization of the Dravidians of the Indus riparian region, we can estimate the extent and population of that "Harappan" culture during the third millennium B.C. We have good estimates for the populationdensity of the Mediterranean littoral and Western Europe during Roman times. Since that point, we have a generally improving accuracy of population-densities as we move along the centuries up to the present time. Our better quality of knowledge to this effect begins with the census of Charlemagne; through studies of urban centers and Catholic parishes, we have good knowledge of the collapse of the population of Western Europe over the period of approximately 100 years, from the middle of the thirteenth through the middle of the fifteenth centuries. The best quality of our knowledge of modern historical demography, begins during the period of generally rapid upward growth of population worldwide, launched by the Golden Renaissance, following the catastrophes of the fourteenth century.

If we take into account the lowering of productivity per capita through effects of human slavery and other widespread usurious practices, we are able to show a causal relationship between levels of technology practiced and rates of growth of population-densities over these thousands of years.

So, we are able to demonstrate that the increase of the potential population-density of the human species is the result of what we call today "scientific and technological progress." By this means, mankind has so far increased humanity's potential population-density more than a thousandfold, above the level of "primitive hunting and gathering society"—three orders of magnitude.

By the same means, we have increased the potential standard of living of persons. We have increased life-expectancies for populations with good nourishment and sanitation to ceilings of about 85 years, before the cumulative effects of diseases of aging of tissue take their ultimate toll. In optical biophysics, we are presently at the threshold of mastering such diseases of aging of tissue as cardiovascular diseases, cancer, and neurological senility. There is no reason to doubt that the ceiling on aging could touch 120 years or so during the first half of the coming century, wherever nutrition, sanitation, and applications of optical biophysics are provided to accomplish this.

This improvement above the condition of "primitive society" is implicitly measurable. To construct such measurements, we begin with a "market-basket" of physical goods per capita. Even services, such as science, can be measured by aid of these means. As technological progress effects economy of labor in producing for physical needs, we are able to decrease the percentage of the total labor-force required to satisfy even increasing physical quantities of those needs, to leave more years of life available for education, and to devote increasing portions of our labor-force's employment to providing scientific and related services.

Generally, these advances can be expressed in units of usable forms of energy-throughput per capita and per square kilometer of land-area. The raw amount of usable energy, per capita and per square kilometer, must increase; the density of energy applied to a square centimeter of work-area in production must increase. Crude estimates, in terms of kilowatts per per-capita unit of population-density, enable us to describe improvement of the conditions of life of the individual in orders of magnitude.

The application of scientific and technological progress, in the sense we have described that here, has improved the human material condition of life potentially more than 1 millionfold over the condition of primitive society. If we use fully the new technologies now coming into view, that improvement could become 100-millionfold, or even more, during the course of the coming century.

No species of beast could improve its characteristic potential population-density, by its own means, by even a tiny fraction of a single order of magnitude, except by becoming a new species.

So, from the vantage-point of physical economy, the elementary distinction between man and beast is mankind's ability to generate and assimilate efficiently what we term "scientific and technological progress."

If we examine the progress of physical science in the terms of reference provided us by such as Cusa, Leonardo, Kepler, Leibniz, and Gauss, we are able to show that the progress of scientific knowledge is delimited by certain permanent principles rightly termed "laws of the universe." What scientific progress accomplishes, is an increase of the efficiency with which human exertion is applied purposefully to our universe. The less imperfectly we understand those laws, the less imperfect our efforts, and the greater our potential population-density becomes.

For most educated persons today, there is a formal diffi-



High school students from Camden, New Jersey developed an experiment for the space shuttle, to test how an ant colony would behave under conditions of weightlessness. Through "crucial experiments," the student develops his or her independent knowledge, rather than regurgitating the content of textbooks.

culty in what I have just reported. Those who imagine the laws of the universe to be fixed in the way a Descartes, or Newton, or Maxwell insist, must either underrate mankind's powers to alter conditions in the universe qualitatively, or would assume what we can show possible for science now to represent an overturning of universal physical laws.

This apparent difficulty vanishes, if we define the laws of the universe as Cusa and Kepler did. Instead of assuming, wrongly, that the laws of physics are mechanical ones, we must accept the fact that what appear to be mechanical sorts of laws of physics are changeable by man's actions. That does not mean that man has the power to change the actual laws of the universe; it merely shows that Descartes, Newton, and so forth have defined the meaning of "physical laws" wrongly. The true laws of our universe govern the way in which we are permitted to change what Descartes, Newton, et al. insist are the mechanical "laws of physics."

I shall turn our attention to the practical implications of that issue, as far as this bears upon the importance of laying the basis for mastery of the Gauss-Riemann complex domain in secondary education, in the proper location here. Having merely identified the existence of such a consideration, I now resume our approach to the crucial point.

All scientific progress depends upon a capability of the human mind which is lacking in the beasts, the creative potential of the human mind. The controversial point I now introduce, is this: that the mission of secondary education is not to prepare a pupil for a specific sort of higher education or employment, but rather the broad development of the creative potential of the adolescent mind. This is the proper meaning of "classical humanism" in secondary education, as that has been understood by the leading proponents of such classical secondary education since the Brothers of the Common Life.

2. Classical education

Classical education signifies two things. Over the long reach of its existence in Western European civilization, it pertains to a method of education, with included emphasis upon the classical fine arts, history, and pre-scientific curricula. In any period of progress of our culture, it means situating the general principles of classical secondary education in terms of reference to the existing state of mankind, including the presently emerging levels of scientific progress.

It means making the secondary student conscious of the role of the creative process in history, and use of selected primary source-materials of literature and experimental demonstrations, to cause the pupil to become familiar with the habits of thought exhibiting the creative workings of individual minds. To assimilate that experience from the past, such as crucial scientific experiments, in such a manner, the pupil is obliged to bring to bear his or her own creative potentials, to attempt to reproduce in his or her mind the same kind of mental processes

employed by the great discoverers of the past.

This requires a shift away from the commonplace practice in writing and classroom use of textbooks today. The emphasis is placed upon selections of primary source materials from the periods in which great accomplishments were contributed. The modern textbook "explains away" precisely that reexperience of past discoveries which is most essential to fostering the student's mental-creative potentials.

Take, as a case in point, the teaching of the differential calculus.

The idea of a differential calculus was discovered by Johannes Kepler. Kepler specified the requirements for this in his published writings. On the basis of Kepler's specifications, the construction of a differential calculus was undertaken by Blaise Pascal. Leibniz had begun work along the same lines, based on Kepler's specifications, before settling in Paris for advanced studies, during the years 1672-76. During those four years, Leibniz worked through the private papers of Pascal, and completed the elaboration of a differential calculus in a paper submitted to his publisher, before leaving Paris, in 1676.

The London Royal Society devoted the succeeding 10 years to an effort to rebut Leibniz's work on the calculus, with the result that Newton's doctrine of fluxions appeared a decade after Leibniz's original dissertation on the differential calculus. What Newton produced was not a differential calculus, but rather the attempt to simulate the results of Leibniz's calculus by use of previously well-established mathematics of "infinite series." By the beginning of the nineteenth century, Newton's pseudo-calculus had been scrapped, although the work on "infinite series" as such was retained.

During the 1820s, a powerful factional opposition to the London Royal Society emerged around Edinburgh and Cambridge universities in Britain. The famous Charles Babbage was a prominent public figure of this faction, and so a contributor to the later establishment of the British Association for the Advancement of Science, the mother-organization for the American Association for the Advancement of Science (AAAS). This faction pointed out that no one in Britain (during the 1820s) could match the level of science then practiced on the continent of Europe or in the United States. Babbage and his anti-malthusian backers proposed to remedy this lamented state of affairs.

Among the factional papers produced by this faction in Britain was a dissertation, "D-ism and Dot-age," in which "D-ism" signifies Leibniz's differential calculus, and "Dotage" Newton's dogma of "fluxions." As a result, the symbolism and algebraic features of Leibniz's calculus were standardized in the English-language textbooks of the nineteenth and twentieth centuries.

What these textbooks produce is not the differential calculus itself, but rather some of the derived algebraic features of that calculus, explained from the standpoint of Leibniz's bitter adversaries, the French Cartesians. Augustin Cauchy was at the center of this neo-Cartesian parody of the differential calculus. The differential calculus is taught from Cauchy's standpoint in the textbooks and relevant classrooms today.

The result of this arrangement of textbook-education, is that the presentation of the principles of a differential calculus is mystified in the most damaging way. The proper approach avoids these commonplace problems.

The use of crucial primary historical sources makes the principles of the calculus readily available in a demystified and comprehensible way to graduates of secondary schools. This is accomplished by including the treatment of the calculus within the proper ordering of the student's tracing of the steps of progress, since the fifteenth-century Renaissance, leading up into the work of Kepler, and the work of Desargues, Fermat, Pascal, and Leibniz.

The method required to effect this result, is the teaching of elementary constructive geometry by teachers who know this material from an advanced standpoint. This example is used here to illustrate some general features of classical humanist modes of secondary education.

For the mastery of mathematical physics up to the work of Karl Gauss, two elementary notions of mathematical physics must become intelligible to the student, in terms of proofs. On the side of mathematics as such, the student must master what is known, since the work of Bernoulli and Euler, as the "isoperimetric theorem" of topology. On the side of physics, the isoperimetric principle of topology is known as Leibniz's Principle of Least Action. Both conceptions are introduced to modern physical science by Nicolaus of Cusa, in his 1440 De Docta Ignorantia.

At the outset, until the student has progressed to about the level of the tenth through thirteenth books of Euclid's *Elements*, and also Archimedes' theorems on the subject of the quadrature of the circle, the student is not equipped to reconstruct proofs of sufficient rigor to make truly intelligible the notions of isoperimetry and least action. However, from the beginning of instruction of students in constructive geometry, as Jacob Steiner's text *Synthetic Geometry* illustrates this, the teachers must recognize the concepts of isoperimetry and least action as educational goals toward which the process of education in constructive geometry is leading.

The introduction of Luca Pacioli's reconstruction of proof for the uniqueness of the constructability of the five Platonic solids comes in naturally during the portion of the constructive-geometry curriculum referencing the contents of the tenth through thirteenth books of Euclid's *Elements*. Also to be introduced at this point, is the work of Pacioli, Leonardo da Vinci and their collaborators on the proof that all healthy living processes are distinguished by morphological patterns of growth and derived function harmonically congruent with the Golden Section.

The teacher, at this point, teaches such historical materials of the internal history of scientific progress from the

vantage-point of the later work of Kepler and of Euler, Bernoulli, and Gauss. The rule, again, is elementary principles taught simply, but under guidance of an advanced standpoint.

On the basis of these foundations, the students are prepared to be introduced to the most crucial features of the work of Kepler. Properly prepared classes are able to handle such material at the levels of the tenth and eleventh grades. Kepler's famous paper on the snowflake should be emphasized: The relationship between isoperimetry and physical least action begins thus to be understood in practical terms of reference.

Kepler's astrophysics, including his treatment of the relationship between magnetism and universal gravitation, should be taught from the vantage-point of the teacher's knowledge of the work of Gauss on these matters. Accordingly, the teacher introduces the notion of self-similar-spiral action at this point, and shows how plane projections of elliptic cross-sections of conic self-similar spirals bear upon the elliptic characteristics of the Kepler orbits and the harmonic characteristics of those orbits.

The gifted student at that level will recognize more or less readily the significance of the notion "curvature of physical space-time." Although other sectors of the class may not see this so clearly, the teacher must understand this, and guide the instruction in the way which leads the students toward later comprehension of this matter.

The significance of Kepler's specifications for development of a differential calculus and elliptic functions are introduced at that point. The first objective is to lead the student through the work of Pascal and Leibniz, to the effect that the student reconstructs an elementary differential calculus as were it his or her own discovery from the standpoint of geometrically-determined difference functions. The second, related objective, is to develop Leibniz's notion of least action from this same standpoint, aided by primary source materials from Fermat, and crucial-experimental forms of demonstration of least action in terms of refraction of light. The same approach, incorporating the indicated emphasis on self-similar-spiral action as a higher (than simply circular) form of physical least action, lays the basis for the twelfthgrade student's grasp of the rudiments of elliptic functions and of the complex domain generally.

That is an abbreviated overview, but it illustrates the point. Instead of the student's regurgitating an approved form of textbook response to a question, or employing a textbook procedure for solving a problem, the student must respond from the standpoint of his or her own independent knowledge. By "independent knowledge," one ought to signify the ability to reconstruct the proof for everything which the student adopts as knowledge.

The most important aspects of such "independent knowledge," are those pertaining to what are called "crucial experiments," experiments which demonstrate a principle of sci-

ence, and do this in a way which overturns what previous opinion has adopted as perfected principles.

The same principle applies to the classical fine arts. The student must be led to the ability to adduce, as independent knowledge, the purpose achieved by each aspect of classical fine art. This must be accomplished by demonstration of the principles shown in selected primary historical sources. The student must be able to construct examples which demonstrate those principles efficiently.

All of this, classical approach to development of scientific method and of classical fine arts, must be situated in a view of current events as "present history." History, past, and future, is taught from this vantage-point, to the effect that the student views the present as acting upon the results of past history to produce future history.

History is best taught on the secondary level from the standpoint of reference to classical tragedy. The models of Aeschylos, Shakespeare, and Schiller are the most essential, but Cervantes' *Don Quixote* should also be referenced as a form of classical tragedy. By aid of this approach, the student is situated to distinguish between problems and man-made crises in history. For every problem, there is a potential solution; "crises" signify the calamities which result when leading institutions, or individuals, stubbornly fail to develop and apply available practical remedies for major problems of society in general, or individual life in particular.

The approach to the subject of history from the vantagepoint of the principles of classical tragedy, impels the student to view the knowledge gained from science and classical fine arts as indispensable weapons for the shaping of history. The principles learned from scientific and classical education are identified as guides to practical action in both statecraft and daily life. The student grasps the point, "What I do with my life can make a difference in determining the opportunities in future history." The student grasps the point, that the creative potentials of his or her mind make a difference in shaping the outcome of present history, and that he or she is an important person for society as a whole on that account.

The student develops a sense of certainty respecting the fact that what makes each of us human, above the beasts, is the creative potential of the individual human mind, and nothing but that.

In modern times, the term "humanism" has been used often to imply an anti-religious standpoint. "Secular humanism," means that and more. Classical humanism signifies that the human individual's creative potentials are the individual personality, the soul, and that it is this aspect of the individual which is in the image of the living God. This signifies, that only from the standpoint of development of those creative potentials, is mankind capable of knowledge of the lawful ordering of universal creation, and is mankind capable of being better morally than a beast to mankind.

The function assigned to classical secondary education,



Instructor demonstrates the principles of constructive geometry, including the "Maximum-Minimum Principle" of Nicolaus of Cusa, the founder of modern physical science.

is to bring to the highest relative degree of general development, those creative potentials of the individual which set mankind above the beasts. Youth so developed represent the optimal capability for effective response to whatever challenges higher education, employment, and adult life generally may present to them.

3. The 'hereditary principle'

As I have stated here earlier, my most important contribution to the science of physical economy is a fresh proof that the creative processes of the individual human mind are susceptible of intelligible representation by the conscious human mind. By "intelligible representation," I mean, inclusively, the sort of rational representation we associate with the idea of mathematical physics.

The qualification I must add to that, is that creative mental processes can not be represented by any linear "models." No system of formal deductive reasoning could describe such processes. In the language of mathematics, the creative processes are intrinsically "nonlinear." The problem of intelligible representation of creative processes was the particular concern of one among the greatest scientific geniuses of the nineteenth century, Prof. Bernhard Riemann, the acknowledged pioneer in physical relativity. Once I had defined the conditions for intelligible representation of creative processes, by the early 1950s, I turned to the work of Riemann and one of his important successors, Georg Cantor, to identify the specific mathematical methods needed for an adequate representation of my solution to the problem.

My work on this subject was prompted by a commitment

to refute the absurdity of Prof. Norbert Wiener's dogma of statistical "information theory." My initial proofs of Wiener's absurdity took the form of an attack upon the central fallacy in the work of Immanuel Kant, specifically Kant's arguments of the impossibility of conscious representation of what he termed "synthetic judgment a priori." My approach was to stretch the capabilities of formal deductive logic to their limits, where deductive logic breaks down. This section is a summation of that first step of my proof.

The most convenient model of a formal deductive logic is Euclid's *Elements*. The appropriateness of this choice is severalfold.

Euclid's *Elements* is sometimes identified as the work of a "false Euclid." The work appears to have been composed, at least in the main part, in Ptolemaic Egypt during approximately the second century B.C. The internal evidence from the work itself indicates that these books were an eclectic potpourri of work done a century or more earlier, in Magna Graecia, Athens, and the Cyrenaic temple of Ammon, plus some additional elements on conics taken from the school of geometry at Alexandria. The original work appropriated so had been a study of geometry based upon what we term today "constructive" or "synthetic methods." Euclid's *Elements* is chiefly a rewriting of the work from those various earlier sources, an attempt to restate these theorems according to the terms of a formal deductive nominalism.

Ptolemaic rewriting of geometry along deductive lines coincided with the introduction of the nominalist form of grammar imposed upon the Latin. Earlier, as Panini's philology from approximately the fifth century B.C. insisted, the Indo-European languages were based on transitive varbal action, rather than nouns. This also coincided with the production of the hoax called the Ptolemaic system of astronomy, proven to have been a reworking, from a deductive standpoint, of a more accurate solar astronomy established by classical Greek culture about a century earlier. Indeed, the earliest known calendars were solar-astronomical calendars (not, as is commonly argued, Mesopotamian lunar calendars). This was the same period in which the variety of sophistry known as Stoicism was introduced, to become later, with Epicureanism, the characteristic outlook of degenerating Roman imperial culture.

In the appropriate later location here, I shall indicate the significance of those coincidences of the second century B.C. for the practical problems in philosophy of education today.

A deductive geometry has two cohering primary limitations. First, it prohibits a consistent form of intelligible representation of entire classes of forms which exist in the physical universe. It suffers also a directly related fallacy, that all forms of mathematics premised upon the model of a deductive logic are capable of only linear representation of processes, whereas all of the most important classes of physical processes are intrinsically "nonlinear."

All mathematics based upon formal deduction begins with the adoption of two classes of purely arbitrary assumptions. The first class of such arbitrary assumptions we term "axioms." The second class, we term "postulates."

Axioms are asserted, without proof, merely upon the premise that their universal truthfulness ought to be considered "self-evident." So, we have the false and absurd assumption of the self-evident existence of a point, and that a straight line is defined as the shortest distance between two points. From axioms of such a character, an entire deductive system of mathematics is constructed.

The postulates are added in the effort to avoid certain among the insoluble ambiguities and falsehoods intrinsic in any axiomatic system. The addition of the famous "parallel postulate" in formal Euclidean geometry is an example of this. In other words, the axioms are fundamental, and the postulates added patch-work assumptions, also submitted without proof, and treated as if they were axioms.

If we begin to reconstruct any deductive geometry from the starting-point of a set of adopted axioms and postulates, we obtain results which are summed up under the title of an "hereditary principle" of any formal deductive system. It is the examination of that "hereditary principle" which leads us to the first stage of successive proofs of the intelligibility of individual creative-mental processes.

Starting with the set of axioms and postulates, we derive a combinatorial set of deductive theorems directly from those axioms and postulates. By combinations of the same axioms and postulates with that first layer of theorems, the latter now treated as postulates, we derive a second layer of theorems. This process can be repeated more or less indefinitely.

The result of a continuing iterative process of this sort defines an open-ended lattice, in which each point of the lattice corresponds either to an axiom, postulate, or theorem of the lattice as a whole.

For that reason, any theorem which is proven not to be inconsistent with any among the axioms, postulates, and theorems which precede it, in that ordering of iteration, contains nothing which is not implicit in the original set of axioms and postulates. This is the significance of the term "hereditary principle" used in that context.

There are paradoxes to which such deductive systems lead us whenever physical science produces a crucial experimental discovery, the latter the simplest model of a product of creative-mental activity by an individual mind.

I use the more popular scientific term, "crucial experiment," in the restricted sense of a Riemannian "unique" experiment. As a model of such a *unique experiment*, one may choose Riemann's own famous 1859 paper, "On the Propagation of Plane Air Waves of Finite Amplitude." Not only did that paper define the principles of transsonic and supersonic flight of powered aircraft, but, as Lord Rayleigh, among others stressed, if powered transonic flight were possible, then the gas theory which Rayleigh defended was experimen-

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tally absurd. By "unique experiment," one signifies an experiment so designed that it demonstrates a principle of nature, and thus overthrows all theory which presumes a contrary result.

In the case such a "crucial" experiment demonstrates a theorem contrary to an existing body of scientific opinion, what is proven is not only that a contrary theorem is wrong; it is also proven that the entire body of mathematical physics containing the argument disproven is wrong. Hence, the popularity of the term "crucial" for such experiments; for special reasons, which will become plainer, I prefer Riemann's designation of "unique."

There are certain preconditions attached to defining an experiment as "unique." Those matters of experimental method are not at issue, so we need not treat them here; it is sufficient to know that our discussion here is limited to that class of experiments which satisfies those preconditions. For the moment, we limit the discussion to the scope of mathematical physics.

In the case a unique experiment disproves an important theorem of some deductively consistent body of mathematical physics, the first measure to be taken is to apply the "hereditary principle" of deductive lattices to that body of mathematical physics as a whole. At the very least, one or more of the set of axioms and postulates of that system must be destroyed, and this action must be continued until we have rooted out every axiom and postulate which is inconsistent with the results of the unique experiment.

As a result, we have then two deductive mathematical systems where we had but one earlier. Let A designate the old system, consistent with the old set of axioms and postulates. Let B signify the replacement lattice, purified of all of the fallacies proven to exist in A. In this case, no theorem in system A is consistent with any theorem in lattice B, and none in lattice B consistent with any in lattice A.

From the vantage-point of lattice A, the existence of lattice B is "an act of creation." The action of the individual mind, which generated the strong hypothesis on which the unique experiment was premised, has transformed lattice A into lattice B, to the effect that no lattice-point in B coincides with any lattice-point in A.

The problem is, that although we are obliged to say that the relevant scientist's mind "created" the conditions for existence of lattice B, deductive analysis prohibits any effort to supply an intelligible representation of the process of creation through which this result was accomplished.

For reasons already identified, the gap between lattice A and lattice B is very small. In modifying only those axioms and postulates which must be modified to correct for the results of the unique experiment, we have made the absolutely minimal degree of change possible in a deductive system: only the one or more elements of the lattice addressed so. It would be impossible to make the gap between the two lattices smaller than this deductively. Yet, in deduction, we can say

nothing about that gap itself.

In that gap lies the action of creation.

That which we have just outlined, is a summation of the argument made by Immanuel Kant. Kant could not deny the existence of creation, nor the form of creation associated with the results which he associated with "synthetic judgment a priori." Yet, he insisted that the creative mental processes could not be given an intelligible representation.

Kant overstated his case. Had he said, "No intelligible representation of creative-mental processes is feasible within the bounds of a formal deductive logic," his argument would have been correct. He went too far, in asserting that no intelligible representation was possible; his error was that of assuming that only formal-deductive methods are capable of supplying an intelligible representation.

Norbert Wiener, John von Neumann, and others perpetrated the same absurdity as Kant did, in their doctrines of statistical "information theory" and doctrines of brain function. It is important to strees, that in none of these cases was the absurdity an innocent consequence of an honest error.

Kant was fully aware of the fact that a well-developed alternative to deductive methods existed in the synthetic-geometrical method of Plato, Cusa, Leonardo, Kepler, and Leibniz. Kant had built his career in Germany as an apostle of David Hume and the formalist Wolff, in the stated intent to eradicate the influence of Gottfried Leibniz from German universities. Even after his open break with Hume, during the 1780s, Kant adhered to his hatred of Leibniz and synthetic methods, and also hysterical hatred against the classical idea in science and fine arts generally.

Norbert Wiener was expelled from a scientific seminar at Göttingen University by none less than the great David Hilbert, for reasons of the stubborn incompetence of Wiener's scientific method. The issue was essentially the same as that between Kant and Leibniz. John von Neumann had a long track record as an hysterical fanatic on the same issues. Just as Wiener's "information theory" is trash, so is von Neumann's collaboration with Oskar Morgenstern in their Theory of Games and Economic Behavior. The assumption underlying each of these follies is the same which Kant asserted in his Critique of Judgment.

The solution to the problem of intelligible representation was already implicit in the Socratic dialogues of Plato. The Socratic method is the criticism of propositions by aid of the "hereditary principle," to the effect of showing that certain axiomatic assumptions are necessary to that proposition, and proving those assumptions to be absurd in some crucial respect.

Resuming our scrutiny of juxtaposed lattices A and B, let us assume the case in which only one axiom of A was modified to yield B. This is the simplest case which defines a deductively unbridgeable gap between the two lattices. Another name for such a gap is "discontinuity." In formal mathematics, we speak of such discontinuities; in mathematical

physics, we prefer to recognize such gaps as "singularities." The slightest alteration in the set of axioms and postulates of any formal deductive system generates such a discontinuity.

The converse is also true. The appearance of a discontinuity over the span of short gaps within what is otherwise a continuous function, is experimental demonstration that some change in the lattice-work of the theorem-set apparently applicable to the state of the process prior to the discontinuity, has occurred by the time the other side of the gap is reached.

The general observation to be made, is that the process of fundamental scientific discovery is a continuous one, in the respect that one such transformation establishes the preconditions for a subsequent one. For such reasons, it is clear that the process of scientific progress is of the character of a continuous function; yet, the appropriate function which might provide us an intelligible representation of the process so defined, is one based on the successive generation of discontinuities of the form we have identified.

Leibniz had already provided me clues to solving such a problem, in locations including his *Monadology*, one among the favorite Leibniz readings of my early through middle adolescence. I was moved to attack Wiener's thesis, beginning 1948, because of my established interest in the subject of what is termed the "negative entropy" characteristic of living processes. In studying Prof. Nicholas Rashevsky's writings on biophysics, part of my work in the project of refuting Wiener's "information theory," the obvious failure of Rashevsky's otherwise brilliant work was his use of "perturbation" theories as a ruse for attempting to circumvent the fact that even his own construction of models of cellular living processes showed the function of life to be a continuous function most characterized by discontinuities.

To be continued next week

For further reading

"The libertarian conspiracy to destroy America's schools," *EIR* Special Report, by Carol White and Carol Cleary, with a special appendix by Lyndon H. LaRouche, Jr., "Saving our children: reintroducing classical education to the secondary classroom."

"There is no freedom without freedom to search for truth," by Lyndon H. LaRouche, Jr., *EIR*, May 1, 1987. A discussion of the alarming effects of the shutdown of private scientific research in the United States.

"The right and wrong usages of the term 'reason,' " by Lyndon H. LaRouche, Jr., EIR, Jan. 8, 1988.

"School Integration and Busing—A Fresh Look," by Lyndon H. LaRouche, Jr. Pamphlet issued by the LaRouche Democratic Campaign, February 1988.

FIRInternational

Will Russia's military solve her economic mess?

by Criton Zoakos

The reports from Moscow are growing curiouser and curiouser for professional "Kremlin watchers" in the West. The substance beneath them, however, remains unchanged.

Politburo member Aleksandr Yakovlev, Gorbachov's closest associate in the "glasnost" venture, an intimate of Armand Hammer and an alumnus of Columbia University, has disappeared from public view since Dec. 15, 1987; the powerful, ultranationalist Pamyat Society, purveyors of Russian-chauvinist sentiments in the ranks of the Soviet armed forces' officers corps, has been circulating with immunity signed calls for the removal of Yakovlev from the Politburo; a Central Committee Plenum scheduled for mid-January is postponed without explanation, while a Central Committee conference on the subject of the state of the Soviet economy is held without General Secretary Mikhail Gorbachov's attendance.

Following that, the Soviet government announces the dismissal of Nikolai Talyzin, the chairman of Gosplan, the State Economic Planning Commission, and his replacement by First Deputy Premier Yuri Maslyukov, formerly the chairman of the Soviet Military Industrial Commission.

The important question behind these very interesting developments, is: What is happening with perestroika? How is the "restructuring" of the Soviet economy doing?

This question was supposed to be the subject of the postponed Central Committee Plenum, which was slated to examine the country's economic performance during the second half of 1987. Soviet economic performance during the first half of that year was universally judged to have been a disaster. This was the conclusion of a series of Western intelligence service reports presented before Senator Proxmire's hearings on the subject at the Joint Economic Committee; its findings were virtually identical to those of the Soviet Central Committee's Plenum of July 1987, where Mikhail Gorbachov himself reported on the disastrous results, warned that "things would get worse before they get better," and made a rather melodramatic plea to push forward with his perestroika. "Perestroika is the last chance we have for modernization," Gorbachov said with unusual candor, and his speech was published in the Soviet press with equally unusual candor. "If we fail in implementing perestroika, our society will revert to stagnation and will not dare try to modernize again for many decades." During that remarkable speech, Gorbachov pledged that he would resign at the end of three years if his perestroika fails.

We are now eight months into those three years.

The fact that the chairman of Russia's "military industrial complex," Yuri Maslyukov, has replaced the civilian Talyzin at the Gosplan, is significant in its symbolism, but will not tell us which way the Soviet economy is going. With the Maslyukov appointment, the Kremlin made the obvious managerial decision: Since the only efficient and productive sector of the Soviet economy is the military-industrial sector, the obvious thing to do with the disastrous civilian sector, was to put it under the management of the best proven managers, those who run military production.

Some would falsely argue that the Maslyukov appointment proves that the Soviet civilian economy is doing badly.

In fact, the Soviet civilian economy has always done badly. The right conclusion to be drawn from the Maslyukov appointment, is that the Soviet military economy is doing very well indeed; so well, that it is now taking over every aspect of the Soviet "civilian" economy that will be left to the jurisdiction of the "public sector," after the privatization reforms of perestroika go through.

There is no civilian economy

When Western analysts attempt to answer the question, as they are currently doing, "How is the Soviet economy performing?" they perennially commit the same methodological error, namely, they apply the same criteria as they would to any other country's economy. The entire history of the Soviet state, from Lenin onward, if viewed properly, demonstrates that there exists no such thing as an ordinary economy. What to the naive appears as a Soviet civilian economy, is merely the infrastructure necessary to service the military apparatus of the state. The case of the recently rehabilitated Nikolai Bukharin serves well to demonstrate the point, as is the case of Stalin's notorious First Five-Year Plan, which succeeded Bukharin's own "New Economic Policy," the perestroika of the 1920s.

The central criterion that must be employed in studying the Soviet, or any other, economy, is investment policy: Who controls it, how is it controlled; and what specific decisions does it produce. Few, if any, persons, in U.S. intelligence establishments, are focusing on these particular questions adequately. Instead, a great deal of secondary information is being produced on consumer horror stories, especially about the Eastern European satellites, but also about the Soviet Union proper: Romania has prohibited the driving of all private cars; outlawed by decree the use of light bulbs brighter that 45 watts; prohibited home heating temperatures over 57 degrees. Bulgaria has virtually no meat consumption and rations apples to one per person per week; Poland's economic reform principally consists of a 200% price increase in food staples.

From Eastern Europe as a whole, there has been a catastrophic collapse of exports to the world markets which began in 1984 and continues today. Last year's total exports from Eastern Europe combined were less than the exports of Singapore—a city of about two million population. The OECD, which attributes this collapse to the labor-quality content of East bloc manufactured products, recommended that the East bloc economies be placed in the category of "newly underdeveloped nations." The Soviet Union's exports to the world are almost exclusively unprocessed raw materials—with the telling exception of one exported manufacture: weapons and munitions, in which they lead the entire world.

Once an intelligence analyst makes the decision to treat the Soviet economy not as any ordinary economy but explicitly as a war economy, most analytical problems disappear, and the focus is placed on the important question: Who controls decisions on military-industrial investment, how is the control exerted, and what decisions are the Russians making now respecting the future course of their military industrial investments?

Behind these questions lies the secret of perestroika. It is not a new phenomenon. When Czarist Russia lost the Crimean War, Russia embarked on a perestroika project which history books recall under the rubric of the "Emancipation of the Serfs," and later, Count Sergei Witte's reforms—all with the blessings of Fyodor Dostoevsky. Earlier, Empress Catherine the Great attempted a perestroika project of her own under Prince Orloff, in order to build her naval power; both the February and October 1917 "revolutions" were emergency, wartime measures to enforce perestroika, on the basis of blueprints prepared by the formidable Procurator Pobedonostsev and the Okhrana; in each and every instance, Russia was seeking to develop an industrial/technological base for military power and nothing else.

The much touted Bukharin-Stalin debate over collectivization was simply over the one question of how to accumulate capital goods to invest into a military industrial base in a country unable to accumulate anything for investment. Bukharin proposed a certain variant of perestroika: let the middle classes (the kulak) accumulate, and then let the government take their foreign exchange earnings and purchase capital goods from the West: the New Economic Policy. The Bukharin policy succeeded in forming a rudimentary industrial infrastructure upon which Stalin, later, based his ambitious military-industrial drive known as the First Five-Year Plan.

Both during NEP and the follow-up Five-Year Plan, the sole source of investment goods, was Western industrial corporations. The first five year plan merits close scrutiny today. Such a scrutiny will demonstrate beyond doubt two conclusions: First, everything that was undertaken and completed with that plan, without any exception, was military-industrial infrastructure; second, nothing would have been accomplished during the Five-Year Plan, without the ridimentary earlier infrastructure put in place by Bukharin's NEP. None of this is accidental: The blueprints of the First Five-Year Plan were prepared not by the Communist Party per se, but by the generals of the General Staff. Nor is it accidental that Bukharin's earlier NEP had been aggressively promoted by Russia's leading military lights of the period, Marshal Tukhachevsky, the Czar's most brilliant general, who saw Lenin as his instrument, and the scion of old Russia's most proudly military clan, the "economist" Preobrazhensky.

As for the current reincarnation of perestroika under Gorbachov. Its origin is in the 23rd Communist Party Congress of 1966 and the unique role played there by Marshal Sokolovsky personally. The keynote speech read by Leonid Brezhnev had been written and handed to him by Marshal Sokolovsky. The Brezhnev speech was a paraphrase of an

article in the magazine Communist of the Armed Forces, titled, "On Contemporary Military Strategy," which launched the project Soviet publications call the Scientific Technological Revolution (STR). It stated, inter alia: "The range of problems of military strategy includes the determination of the economic basis of the building of the armed forces, its structrure, its equipping . . . the determination of the composition of the armed forces for peacetime and for time of war, the making of a reserve of arms, equipment, primarily nuclear weapons, as well as material reserves. . . ."

Following that congress, a cautiously growing alliance between the General Staff and the KGB under the just-appointed Yuri Andropov, methodically strangled the Brezhnevite party-hacks, until, eventually, it brought about the present combination in Gorbachov's perestroika. They intend to have the best of both Bukharin's NEP and Stalin's relentless industrial drive.

The Western role

As to how they proceed to make investment decisions, it is notreally up to them. Much more depends on what a certain group of leading Western industrialists intend to give Russia. For this, the prudent intelligence analyst must watch closely two groups: in the United States, the interests that promoted William Verity to the post of secretary of commerce; in Europe, the industrial-financial interests which, in the first week of February, propelled Lothar Spaeth, the Minister President of West Germany's Baden-Württemberg, on a two-day visit with Gorbachov in Moscow. That group, which includes Olivetti, Siemens, Phillips, FIAT, Daimler-Benz, et al., represents the front line of European high technology—the only thing that counts in Soviet military technological-investment decisions.

Only one constraint limits Russian military decision makers at this time: what technological resources are available to them for investment? As was the case in in previous applications of perestroika in Russian history, they are dependent on what the West will make available to them for investment.

In all previous instances, going even as far back as the reforms of Peter the Great and of Catherine, the Russian military establishment's options to invest were always constrained by what Western industrial-financial interests were willing to give them. In all previous instances, prior to the present case of Gorbachov's perestroika, the Russians received enough to modernize, but not enough to get ahead of their main competition. This time, they are entering this venture from a much stronger position, and they appear to be giving themselves some three-to-five years to establish preeminence.

Much of their success or failure will depend on the outcome of the present ongoing reorganization of Western Europe's technological and financial giants, such as those promoted by De Benedetti, Agnelli, and the financial coalition of Lazard Frères, Morgan Guaranty, and Brussels Lambert.

Lit Gaz unloads bile on LaRouche

The Soviet weekly Literaturnaya Gazeta on Feb. 3 published an extraordinary, full-page attack on Lyndon LaRouche, Jr. and his wife, Helga Zepp-LaRouche, headlined "Yankees and Teutons: The united neo-fascist party of Europe and the U.S.A. can't wait to get power." Penned by Aleksandr Sabov, the article includes a picture of a Teutonic warrior statue, and an American gun-toting Rambo.

The piece appears to have been rushed to press, to judge by the large number of simple factual errors and misspellings (e.g., "Marco Cuomo" and "Sam Nunni"). Many of the "quotes" attributed to Mr. or Mrs. LaRouche are outright fabrications.

The article is being closely scrutinized by Western intelligence specialists, as a signal piece of Soviet character assassination. Particularly noteworthy is the new Soviet assessment of LaRouche's popular support. A Moscow TV slander just over a year ago had an actor portraying LaRouche say, "Not a single voter supported us." But Sabov now gives LaRouche 10% of the vote.

Ellipses in brackets indicate EIR's abridgement. Others are in the original. Boldface is in the original.

"There is a new breed of people—they were born and live in Europe, but in their spirit and their way of thinking, it's as if they were from the other side of the Atlantic—100% Yankees," the French political scientist Philippe Deviller told me once. "In my books, I call them accordingly, 'Atlantic Europeans' or 'European Americans.'"...

Let this definition serve us as the key to the portrait gallery, which follows below. From its wall, reflecting one another as in a mirror, the "European Yankees" and "American Teutons" are looking. They are related not only by their spirit and their way of thinking. They also have a jointly developed plan already prepared, for worldwide restructuring [pereustroistvo]. [...]

I saw these people for the first time in November 1983, in Rome. The "Club of Life"—that very "Anti-Club of Rome"—together with the American journal Executive Intelligence Review and the "European Committee for Nuclear Energy," announced a conference here with open doors. The doors indeed were open, but on a table at the entrance, there was a list for the registration of guests. Having signed in, I headed into the room, but suddenly some young man shouted at me:

"You are from Literaturnaya Gazeta? Ay-yi-yi! Such a

man you offended, *such* a man! He comes to you with good and peace, and you bludgeon him over the head! How could you, oh my God, how could you insult him so?"

"But who is he?" I said, totally perplexed.

"Lyndon LaRouche himself!"

He spread in front of me a fresh issue of LG, which had just arrived in Rome (from Oct. 26, 1983). Quickly perusing a commentary by our political observer Fyodor Burlatsky, "Star Wars. The Space Program: A Casus Belli?" I shrugged my shoulders:

"For me, this is normal polemics. We don't share your ideas, and what's more, we consider them dangerous for peace. But what does this have to do with Lyndon LaRouche? Wasn't President Reagan, half a year ago, in March, the first to propose the idea of a 'Strategic Defense Initiative'?"

"No! Not the first! Reagan is a very respected person, very respected. But originally this idea belonged to La-Rouche. Already a year ago, we held the first seminar in Bonn on the technological and military-strategic prospects for an anti-missile shield in space, capable of averting war. And you declare to the whole world, that this is a casus belli!" [...]

Wiesbaden is the residence of Helga Zepp-LaRouche; the little town of Woodburn in the state of Virginia, U.S.A., is the residence of Lyndon LaRouche. From these sister-cities, signboards are crawling out such as: "Fusion Energy Foundation," "Club of Life," "Schiller Institute," "Humanist Academy," "Anti-Drug Coalition"... In Wiesbaden, besides those, is located the headquarters of the "European Workers Party," with branches already in five countries. In each of these, the paper New Solidarity. is published—in translation from the German. The propaganda of "German culture and philosophy," undertaken by the LaRouchites all over the world, and the "war on drugs," in which they painstakingly sidestep the social roots of the phenomenon, are nothing but camouflage [maskirovka] for the true political aims of Wiesbaden and Woodburn.

This "elegant" guard has already dragged into courts all over the world many of those who offended it, who in the heat of their feelings dared to hurl at it the charge of neofascism. But let's remember: It was precisely on the "European Worker's Party" that the first suspicion fell, in the murder of Swedish Prime Minister Olof Palme. To confirm—or to discard—this suspicion could only be done by a simultaneous cross-examination of witnesses, who were close to the scene of the crime, and the suspect Viktor Gunnarsson, a former member of this party. However, on the eve of the simultaneous cross-examination, a photo of Gunnarsson from a super-secret police archive hit the press! Thus, the most important act of the investigation was frustrated—the identification of the criminal! Did he have an alibi or not? Since the suspicion was not cleansed from Gunnarsson, how could it be cleansed from the "elegant" guard, marked with the stamps "Made in the U.S.A." and "Made in Germany"? [...]

How could an even more serious suspicion be washed away—that of not yet committed, but already planned, mass murders? Let's proceed rapidly along our portrait gallery. Professor Erich Bagge of Kiel University, who is already well over seventy, during the war persistently sought the secret of the atomic bomb for the Hitler Reich. Dr. Arnold Krafft-Ehricke was one of the godfathers of the V-2 missile, which he tried to equip with a nuclear-fueled engine. Dr. Adolf Busemann, one of the designers of the swept wing for the jet airplanes of the Hitler "Luftwaffe.". . . These and many other scientists after the war made a decisive contribution to the creation of the American intercontinental ballistic missiles. Today they are the intellectual elite of the party of Teutons and Yankees. [. . .]

[I]n 1979, LaRouche dissolved the "American Workers Party" and instead created a new takeover group, the "National Democratic Policy Committee." This time a different strategy was chosen: The group, with lightning speed, infiltrated the Democratic Party of the U.S.A., which was weakened by its failures of the past years. Now it is making the third attempt to win for its leader the party mandate for the 1988 presidential elections. The chances of the "eternal candidate for the nomination" are, of course, insignificant, but when, in March of year before last, in the state of Illinois' primaries, two associates of LaRouche were among the winning Democrats, a terrible word swept the ranks of the party: "infiltration"! The lists were thoroughly cross-checked: In the primary elections in 29 states, the LaRouchites had fielded 800 candidates! People started talking aloud about a right wing trying to "take over the whole party." [. . .]

"I consider my task today to be to destroy the candidates whom I don't like. . . . You can count it up—all those who oppose me aren't around much longer. I destroyed Mondale in 1984, I will destroy Marco [sic] Cuomo, Sam Nunni [sic], Gary Hart." (From an interview with the French journal Le Nouvel Observateur, February 1987.) [. . .]

And so, the Euro-Americans. What kind of phenomenon is this? [. . .] In the name of what, are they so eager for power, for strength?

"Germany needs a strong and bold leader, capable of awakening in us the will for patriotic actions, and of proposing an idea which rises above our little, everyday concerns," I read in one of the leaflets of the "Club of Life," signed by Helga Zepp-LaRouche. And further on, in bold type: "THAT IS WHY I AM READY TO OFFER MY CANDIDACY FOR THE POST OF CHANCELLOR OF THE F.R.G. [Federal Republic of Germany]..."

Loss of the sense of the border between reality and fantasy, head-spinning projects, megalomania—all these symptoms of a dangerous political ailment have been stated a thousand times by Western commentators, who have been observing the LaRouches for a long time. "Political paranoia"—that is their unanimous diagnosis cum verdict. But history has already known a case, when a maniac with analogous symptoms succeeded. . . . Let us allow the improbable. Let us allow, that Lyndon LaRouche (65) does get into the White House on his fourth attempt, and that Helga Zepp-LaRouche (39) does become chancellor of the F.R.G. The marriage alliance, concluded in 1977, was of profit for both of them: The wealthy young German entered "big politics" on the run, and the American leftist, having turned 180 degrees to the right, so exquisitely smoothed out his manners and speech, that NBC in a program devoted to him called him a "a small-time Hitler." This, of course, is an insult, but to a certain degree also an honor. But is it really so smalltime, if literally from the beak of the nuclear lobby, knocked together by the "European Workers Parties" of the Old World and the ultra-right "Democrats" of the U.S.A., the American administration that is in power today, snatched the idea of the "Strategic Defense Initiative"? "This is the biggest threat to the Russians, and at present it is my biggest victory over them. . . "repeats LaRouche in all his interviews. So then, if fate really did raise the LaRouche couple to the pinnacle of power on both sides of the Atlantic, would they really, having generously and recklessly given their nuclear offspring to others, stay there with their hands empty? [. . .]

The family portrait would be incomplete without the third, the "moral foreshortening": The Teutons and Yankees especially like to hold forth about it. Echoing to a certain extent various concepts from social criticism, they taxi out the crudest demagogy. The West is experiencing decadence. Art and public morality are in decline. Narcotics, jazz, rock music are the proof, that the prayers of St. Augustine have been forgotten. "Sex pollutes the environment more than nuclear waste!" Don't treat people sick with AIDS, but lock them away in quarantine camps, and divert the money for fighting this pandemic, which is spreading throughout the world, to the development of nuclear energy. The "Jew-Masons" and the "Aristotelian oligarchy of usurers" are to blame for the mortal sins, which have struck mankind today. And La-Rouche promises the Americans a "moral presidency," a return to "the spirit of 1776," to the precepts of the founding fathers of the nation, to "neo-platonic humanism." The theme of a "strong America"—strong, of course, by arms first and foremost—is cleverly tied in with populist themes, which the average man has such a weakness for: curing morals, overcoming corruption, cultivation of idealistic notions, which, as the "new Platos" have it, can be inculcated on command, without getting into an analysis of the social causes of spiritual sores. Not to mention rooting out those causes!

Is it coincidental, that ideas analogous to LaRouche's are heard in France from the lips of the ultra-right leader Jean-Marie Le Pen? They are also similar in their popularity with the average man: both here and there, it's already around ten percent. [...]

Interview: Nasrallah Sfeir

Patriarch defends Lebanon's integrity

Patriarch Nasrallah Pierre Sfeir is 67 years old and succeeded Cardinal Khoraiche as Patriarch of the Maronites in 1986. He has undertaken a tour of various capitals with the aim of safeguarding the sovereignty and integrity of Lebanon. On Oct. 20-27 of last year, he was in Moscow, the first Maronite Patriarch to travel there. As he declared to the Italian Catholic monthly *Trenta Giorni*, the visit aimed at exploring the actual openness of the Kremlin's political authorities to work for peace.

He then declared: "I traveled to Moscow and then returned to Rome. Those who received me knew perfectly well that the Maronite Church has always been in communion with Rome, and that it is the only Eastern Church which does not have an Orthodox branch. Our identity as Maronite Catholics is thus very clear to them. . . . I know that in Lebanon there is not a civil war among Lebanese, but a war between foreign powers on Lebanese soil. Since the Soviet Union has allies in the region, I told myself that it was necessary to establish contact with its leadership, to ask them to use their influence to reestablish peace in our country. After 13 years of war, we are at the limit. We can no longer resist."

The following interview was conducted in Rome, on Feb. 6, 1988.

EIR: What are the reasons for your visit to Rome? Patriarch Sfeir: I have come to Rome to participate in the work of the General Secretariat of the Synod of Bishops, of which I am a member, through the benevolent nomination made by His Holiness John Paul II, and also to co-celebrate Holy Mass, presided over by the Pope, in the Maronite rite on Feb. 2, on the occasion of the festival of the Entrance of Jesus into the Temple. I took advantage of this opportunity to have contact with representatives of the Holy See and of the Italian government who deal with Lebanese affairs.

EIR: In the course of the last months, you have traveled a

great deal, it seems, both as Maronite Patriarch and as spiritual representative of those who want to defend the integrity of Lebanon, as the last bulwark of sovereignty of yournation. Do you know that powerful forces in the United States and the Soviet Union foresee the partition of Lebanon and its dissolution as a nation?

Patriarch Sfeir: I have not heard of any decision to partition Lebanon, anywhere I have been. On the contrary, it seemed to me from my discussions that there was the assertion that Lebanon must remain sovereign, free, and independent within its internationally recognized borders.

EIR: You declared in Rome that "if pacification does not arrive immediately, there will be disintegration, not only in Lebanon, but the whole region." Could you clarify this warning of yours a bit more?

Patriarch Sfeir: If Lebanon is partitioned, all the countries of the Middle East will be affected by the partition, and this will be the source of interminable wars. If the partition occurs on a confessional basis, in the sense of there being a ministate for each confessional community, many other such religious mini-states will emerge, and their peaceful survival will be impossible, as they will be characterized by conflicting yearnings. This will cause continual wars and permanent conflict. And this will not serve the interests of peace in the world.

EIR: From Oct. 20 to 27, 1987, you traveled to the Soviet Union, in a trip you defined as "rather political... to promote the pacification of Lebanon."

How do you view the results of that mission now, three months later?

Patriarch Sfeir: What I heard in the U.S.S.R. indicates that the Soviets place value on the independence of Lebanon and its territorial integrity. It is well known that the U.S.S.R., as a great power, has its interests in the Middle East, as in other parts of the world. There is nothing to be surprised at.

EIR: The coming presidential elections will be very important for the future of Lebanon. There are plans to keep the Maronites away from the office of the presidency. How do you see this situation?

Patriarch Sfeir: I do not believe that there are serious plans to keep the Maronites away from the presidency of the Republic, a presidency which was given them as a guarantee of the equality of all Lebanese citizens: There are no second-class Lebanese citizens. When a democratic mentality and spirit evolves in Lebanon, people will not view each other from the standpoint of religious confession, and all will be citizens, equal before the law, and there will be rights and privileges for all, regardless of religious confession. At that point confessionalism will fall away, and there will be no need in the future to reserve certain functions for this or that religious community.

EIR: Lyndon LaRouche, the American politician and candidate for the U.S. presidency, has maintained for years that the only basis for a durable peace in the Middle East is the "progress of peoples" in the region, that is, a vast economic agro-industrial development program for all the nations of the area. Recently, French Agriculture Minister François Guillaume proposed a similar program, a "Marshall Plan" for the developing sector countries. How do you judge such proposals?

Patriarch Sfeir: Any program tending toward progress in the developing sector countries in any region, we greet with gratitude and recognition. The application of the principles of social justice, which the Church appeals to and which it discusses in documents, past and present, in particular in the encyclical *Populorum Progressio*, without a doubt alleviates the differences between developed countries and those in the developing sector. We greet with open arms any project which helps the developing sector countries emerge from their poverty and their need.

EIR: The current Middle East policy of the U.S. State Department is to accord a privileged role to Syria, viewed as the "strong state" in the region, to the detriment of Lebanon, which was once an ally of the United States. How do you view this policy?

Sfeir: Bordering states always have their interests and it is in their interest to cooperate in what is mutually advantageous to them. The situation in Lebanon vis-à-vis Syria is similar to the situation of the United States, for example, with respect to its neighbors, and it is in the interest of bordering countries to be in full agreement, to conserve their sovereignty on their own territory, their independence, the regime which the citizens have adopted for themselves, and their friendly relations, without there being any damage done to their neighbors.

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Soviets orchestrate border conflagration against Thailand

by Linda de Hoyos

While the international press featured front-page headlines on Soviet General Secretary Mikhail Gorbachov's offer to begin withdrawal of Russian troops from Afghanistan May 15, the Soviets were pressing on another theatre in a conflict that has been carefully hidden from the world's view. Since the first week in February, a Thai-Lao border dispute has been escalating into the most serious fighting in Southeast Asia to take place since the December 1978 invasion of Cambodia by Vietnam.

In mid-December, Laotian troops entered Thailand in the area of the village of Ban Rom Klao in the province of Phitsanulok near the Hoeng River, a tributary of the Mekong, and seized a 27-square-mile area of Thailand that juts into Laos. Laos claimed the area was Lao territory. Attempts by Foreign Minister Siddhi Savestila to negotiate a settlement were of no avail, but Thailand took no decisive military action until the end of January, when former Prime Minister Kukrit Pramoj publicly decried the military's low-key policy.

On Feb. 1, Thai jets began bombarding Lao troop positions, sending out five sorties a day. Laotians claim they have downed three Thai F5s, using SAM-9 missiles. In addition, the Laotians Feb. 4 began artillery shelling of Thai villages along a 50-mile stretch of the border to the north and south of the battle zone. Laos is now lobbing 800-1,000 artillery shells into Thailand daily. Bangkok papers feature front-page pictures of Thais scurrying for cover from shelling, and evacuating their villages. On Feb. 11, in an area several hundred kilometers from the battle area, 30 Laotian troops attacked a Thai village, killing several civilians before they were driven back by Thai border police.

As of Feb. 12, Bangkok announced that all Thai forces along the entire 1,000-mile border with Laos were on full alert. The Thai permanent secretary of the interior also reported Laotian troop movements along the Mekong River opposite the Thai city of Nong Khai. On Feb. 9, the Thai military said that it had killed 69 Vietnamese troops in the border war, and had sighted Russian military advisers.

At the same time, the Thais reported they had killed 200 Laotians, wounding another 300-400, in addition to the Vietnamese casualties. The Laotians are well-entrenched in bunkers and tunnels on Hill 1428, which adjoins Laos on its back side. This places Thai troops in the disadvantageous position of attempting to storm up the hill under a rain of fire.

On Feb. 9, Thai Defense Minister P. Kantarat reported that the Thai military was "carrying out new tactical plans, which will take time but will minimize our losses." Those losses can be estimated to be three to four times as many as on the Lao-Vietnamese side—that is, up to 2,000. Thai military officers are referring to the battle zone around Hill 1428 as a "killing field."

Soviet testing point

These facts make the Thai-Lao border conflict the most significant fighting in the region since 1978 and one of the bloodiest conflicts in the world today. Yet not one Western correspondent in Thailand has filed a report from the battle area.

Military analysts in Bangkok, Japan, and the United States view the Lao border provocations not as a local conflict, but as a Soviet testing of Thailand's political will and its military-response capabilities. Speaking to ASEAN foreign ministers Feb. 10, Foreign Minister Siddhi Savestila warned that the dispute was an act of aggression by the Soviet Union and Vietnam against all the ASEAN countries.

That a green light from Moscow was given to the Laotian operations is beyond a doubt. During the height of the fighting, on Feb. 3-6, General of the Soviet Army A. D. Lizichev, chief of the Main Political Directorate of the Soviet Army and Navy, was in Laos, as part of a tour of Indochina.

The Soviet Union, according to the consensus of Indochina watchers in Southeast Asia, has directed operations in Laos for at least the past two years, although 40,000 Vietnamese troops remain in the country. The Laotian capital of Vientiane, not Hanoi or Ho Chi Minh City, is regional KGB headquarters in Indochina. There are 3-5,000 Soviet advisers in Indochina, according to the Joint U.S. Military Assistance Group (JUSMAG) in Bangkok, with 500-1,000 of them operating in Laos.

In the last five years, Laos has become a drug-financed country, producing both heroin and marijuana, with the Thais charging that drug production is sponsored as Laotian government policy.

Since 1976 and the withdrawal of the United States from Southeast Asia, Thailand has been the number-one Soviet target in Southeast Asia after Indochina. Both Japanese and U.S. analysts say that Moscow is not interested in testing

Western political will and military capabilities on the Korean peninsula, since the response would be immediate war-fighting from South Korea. To the west, the Soviets are working for a settlement over Afghanistan designed to prop up the image of Mikhail Gorbachov as the reasonable reformer with whom the West can negotiate, and to secure the domination of the appeasers in Washington. Southeast Asia, where U.S. policy has been one of neglect since the withdrawal from Indochina, is the soft underbelly of Asia now.

The Laotian provocations against Thailand coincide with public Soviet desires to reach a settlement of the Cambodia conflict, an apparent condition required by Chinese leader Deng Xiao Ping for a Sino-Soviet summit. Thailand has acted as a transit point and sometimes conduit for Chinese arms and supplies to the Khmer Rouge guerrillas, which continue to maraud in Cambodia against its Vietnamese-installed government.

For the Soviets, the Laotian border escalation—occurring just as Vietnamese and Thai troops had pulled back from the Cambodian border—serves to pressure Thailand. As a testing of Thai response capability and political will, if Thailand fails the test, then Moscow has a new bargaining chip over China. China has so far issued no statement on the conflict.

The Soviets, however, have implored Thailand to begin talks with Laos to negotiate a border settlement. On Feb. 5, Thai Ambassador to Moscow Prajit Rojanapruk was called to the Soviet Foreign Ministry where spokesman Gennadi Gerasimov warned Thailand to start talking: "An escalation of military actions might lead not just to a sudden deterioration in relations between Thailand and Laos, but could also worsen the situation in the whole of Southeast Asia," said Gerasimov, as reported in the Feb. 5 Bangkok Post. "We regret these border incidents all the more because they are happening at a time when a real prospect of a political settlement in the region is emerging." Gerasimov claimed the current tension "was a vestige of the colonial division of Indochina." Moscow has thus worked to place itself in the position of "superpower mediator" of a "local conflict."

Pattern of provocations

The current conflict is similar to a border battle that occurred south of Ban Rom Klao in the first half of 1987, when Vietnamese troops occupied several strategic hills at the Chong Bok Pass, in Nam Yuen district of Ubon Ratchathani province. The Vietnamese came into the area in January, and a slow Thai response permitted the Vietnamese to entrench themselves in the hills. Not until April did Thailand begin major operations against the Vietnamese, resulting in heavy Thai casualties on the order of several hundred. By June, the Vietnamese had been dislodged.

At the end of the incident, Commander of the Thai Second Army Issarapong Noonpakdee informed envoys to Bangkok that he considered the border incursion a step in the plans of Vietnam's "L Operation." This plan, devised in 1976 by Vietnamese General Vo Nguyen Giap, would annex the 17 provinces of Thailand that curve into Indochina to strengthen Vietnam's geopolitical position.

Before that point, there was a conflict with Laos over three border villages in Utaradit province to the north of Ban Rom Klao, which was eventually settled for Thailand. Other incidents occurred during 1986, in which Pathet Lao forces crossed the border chasing refugees who had settled in Thailand.

After the Chong Bok Pass operation, Thailand and Laos began a rapprochement of sorts, in which Thailand opened border crossings and trade relations were increased. Laos primarily sells electricity to Thailand, accounting for 80% of Laos's foreign exchange earnings (excluding drugs).

During the same period, relations between Thailand and Moscow opened up, including the visit to Moscow of Thai Army Commander-in-Chief Chaovalit Yongchaiyudh in August. On Dec. 5, Soviet Commander in Chief of Land Forces Gen. Yevgenii Ivanovski paid a visit to Bangkok.

The Lao penetration into the Ban Rom Klao area in mid-December coincided with the visit to Bangkok of Deputy Foreign Minister Valentin Nikiforov, who came to brief the Thai government on Soviet intentions to forge a settlement of the regional conflict. The signal for the Laotian military move came from Moscow, where the Laotian ambassador to Russia charged that Thailand was bombing Lao border areas in an effort to maintain tensions. The Thais had evidently been told by the Russians, however, that Laos would soon depart, as on Dec. 24, Armed Forces Commander in Chief Sunthorn Kongsompong declared, "Laos may pull out soon." By the end of December, Soviet Politburo member and KGB chief Viktor Chebrikov was in Laos, as the Laotians used the period of Thai inaction to fortify their positions.

Negotiations may begin on the border conflict Feb. 16 when a Lao military delegation is due to arrive in Bangkok to meet with General Chaovalit. The visit is the result of a note sent to Thai Prime Minister Prem Tinsulanonda by Lao Prime Minister Kaysone asking for talks to end the "great loss of lives and property." A Thai military delegation will also visit Vientiane.

To militarily dislodge the Laotians requires Thailand to take flanking action by crossing into Lao territory in order to attack Hill 1428 from behind and cut Laotian supply lines, an action which the government appears as yet unwilling to undertake. According to Bangkok sources, pressure is coming from the U.S. embassy not to take such action. The embassy, report American sources, has labeled the dispute a "local disturbance" and a near-total press blackout has been placed on the conflict in the U.S. press. On Feb. 10, a day of heavy fighting in Ban Rom Klao, there was no reaction from Washington. However, the State Department did issue a rebuke to Thailand for its refusal to take in more refugees from Vietnam.

'Wehrkunde' meeting swallows INF pact, debates myriad ways to wreck NATO

by George Gregory

Under the shadow of the questionable assumption that the U.S. Senate will ratify the INF Treaty between Gorbachov and Reagan, this year's annual Wehrkunde Conference in Munich, West Germany, over the weekend of Feb. 6-7, became a nest of dazed killer hornets. The target for assault: the Atlantic Alliance itself.

Some 300 took part in the Wehrkunde meeting, named for the defense institute that sponsors it. The Wehrkunde is not a decision-making meeting, but has a semi-official status and is always a barometer of directions in NATO strategic thinking, usually hosting a scrappy debate. Participants included eight NATO defense ministers, 16 U.S. senators, the German federal chancellor, the leaders of the major West German parties, and a sizable corps of journalists, together with considerable representation of the American-European "strategic community" and military professionals.

This year, the gathering was the first major Alliance gettogether since the Dec. 8, 1987 signing of the INF Treaty. The issues in Munich, all revolving around the insoluble paradoxes generated by the treaty will also be at center stage in March at the NATO summit in Brussels.

A number of salient issues were uppermost in the minds of the European participants, who were in the majority, which would have shed light on the INF question. They were not addressed. Among them:

- The fact that U.S. budgetary crisis is overshadowed by the demise of U.S. financial power, and the rapid shrinkage of U.S. productive economic power was not mentioned—even though this is known to be the underlying motivation for America's decoupling from Western Europe.
- The Strategic Defense Initiative (SDI), seen by Europeans as the strongest evidence that the United States might in fact be capable of asserting its own and NATO's interests. Perhaps deferring to Defense Secretary Frank Carlucci, who treated the Strategic Defense Initiative as so much a dead letter to not be worthy of mention, the Europeans let the debate ride on INF alone.
- Dramatic changes in the Soviet order of battle under the intellectual guidance of Marshal Nikolai Ogarkov. This too was ignored, despite intelligence flowing into the United States and NATO on the enhanced priority assigned to stra-

tegic-level operations of spetsnaz (Soviet special forces) and development of electromagnetic-effect weapons and an associated array of "new physical principles" systems.

Given those omissions, not much credibility hung on the Europeans' promises to themselves to courageously set about building European unity.

'A good deal for the Soviets'

French Defense Minister Giraud used visual aids for his remarks on the INF Treaty. The treaty is a "very good deal for the Soviets," he remarked, as he projected two maps onto the screen. The left-hand map showed the areas of Western Europe, colored in dark red, covered by the threat of Soviet nuclear missiles now, with the SS-20 missile launchers which would be removed if the treaty is ratified; the areas of Eastern Europe and the Soviet Union covered now with the Pershing II, Pershing Ia, and the cruise missiles, were shown in dark blue. The right-hand map then showed the changes once the INF Treaty is implemented. In the area threatened by Soviet missiles, there was no change. In the area threatened by U.S. missiles, the blue area shrank to a tiny strip along the border of East Germany.

Another larger area in yellow showed the area in Eastern Europe and a tiny part of the Soviet Union covered if the remaining U.S. nuclear weapons in Western Europe are modernized. The yellow covered only about one-third of the previous blue area!

Before Giraud's graphic demonstration of the effects of the INF Treaty, a brawl had broken out between the West German and American "teams," on the issue of whether to modernize the remaining nuclear artillery, the Lance missile, and to develop other systems such as a stand-off air-to-ground nuclear missile. Both sides manifested extreme symptoms of clinical schizophrenia, not surprisingly, since as Giraud later showed, no "modernization" will make up for the strategic disaster of the INF sell-out.

Modernization of nuclear weapons?

Chancellor Kohl started off with praise for the "numerous advances in all spheres of East-West relations, particularly fundamental reconciliation of differences on arms control

. . . the signing of the INF Treaty in Washington," praise for Mikhail Gorbachov's "willingness to compromise and his call for 'new thinking.' "Kohl appealed to the U.S. Senate to "ratify this treaty as soon as possible."

Unfortunately without the opportunity to examine Minister Giraud's maps, the chancellor went on to insist that there be no "zones of differing security." But he also said he does not want to embark on modernization, but rather proceed on negotiations with the Soviets to also achieve a reduction of these nuclear systems, below the range of 500 kilometers, to "common ceilings." But, then again, the chancellor does not support a "third" zero option which would denuclearize the Federal Republic, and thus fulfill the wildest dreams of the Soviet political and military leadership. "Any aggressor" must still "consider the risks of war to be incalculable and excessive," so that "under the present circumstances, nuclear weapons are indispensible to effective deterrence."

American senators who voiced the suspicion in the hallways, that this rhetorical salad was likely produced in some kitchen in the Bonn Foreign Ministry under Hans-Dietrich Genscher, were undoubtedly on the mark. The next speaker, Hans Jochen Vogel, chairman of the Social Democrats, was far easier to understand: His party is drooling over the power bequeathed by the INF treaty, to chop up any representative of the government coalition who dares to suggest that Mikhail Gorbachov is not the archangel of peace. The Social Democrats, with the imprimatur of the INF Treaty backing them up, proclaim a 300 kilometer nuclear-free zone as their policy, and denuclearization as their goal. They will refuse to vote in favor of any modernization of the shorter-range nuclear weapons at all.

One beleaguered Christian Democrat, the chairman of the CDU parliamentary faction, Dr. Alfred Dregger, therefore protested, "We just have this INF agreement, and now we hear about modernization! . . . We do not want to compensate in the 0-500 kilometer range for what is being taken away in the 500-5,000 kilometer range. . . . How are we supposed to explain to our population that the double-zero option, which removes a threat to the adversary, is good, but the triple-zero option, which would remove weapons which are a threat to us, is bad. We would have no chance to stand up to Mr. Vogel's arguments on that!" A point well taken, which would rationally lead to an appeal to the U.S. Senate not to ratify the INF Treaty, but Dregger did not make that appeal.

If the treaty is *not* ratified, there will be at least a fighting chance to stand off the Social Democrats and the overtly pro-Moscow peace movement. If it is ratified, Dr. Dregger suggested there is no fighting chance. Franz Josef Strauss, the Minister-President of Bavaria and chieftain of the CSU, who has just returned from Moscow, stated point-blank that, since his earlier warnings against the INF Treaty were ignored, it should not surprise anyone to learn that there is no chance for a majority in favor of modernization of the shorter-range

systems in the German parliament. The population, Strauss said, has been too impressed with Gorbachov's supposed desire for peace. He should know.

U.S. hypocrisy

Following the Social Democrat Vogel, the other schizophrenic team went into action. U.S. Ambassador to the Federal Republic Richard Burt spent weeks trying to win the German political world to the INF Treaty. Burt told the U.S. Senate just before the Wehrkunde meeting, that not to ratify the treaty would be to betray the confidence of those like Chancellor Kohl, who had fought to implement the NATO "Two Track Decision," which supposedly compelled the Soviets to negotiate away the SS-20.

Yet in Munich, Burt complained bitterly about the German "tendency to denuclearization," and complained that nowadays "Americans are very concerned about what they are hearing from all sides of the German political spectrum," whereas before INF, Americans could align with one side or another. Something clearly went wrong. Far be it from Burt to admit that INF Treaty itself is wrong.

Outgoing Assistant Secretary of Defense Richard Perle followed, repeated the same complaint, and added the blackmail threat that, without modernization, American troops would be withdrawn from Europe. Perle, who never wanted the Pershing II and cruise stationed in the first place, and has been dead set on cutting SDI to the bone from the outset, was backed up on the second day of the conference by Sen. Sam Nunn, who played the role of vocal proponent of the INF Treaty. Nunn, notorious for his troop pull-out schemes, proposed U.S. troop withdrawal from two standpoints: Either the "chronic" (i.e., presumably incurable) U.S. budget deficit would force a withdrawal, or the pretext of arms-reduction negotiations with the Soviets could be used to achieve "negotiated withdrawal of about half of the U.S. and Soviet ground forces . . . or by reduction in both NATO and the Warsaw Pact to common ceilings."

The remains of NATO "strategy" was left in shreds. The entire debate raged inside the INF Treaty fishbowl, and the lid on the bowl was the Discriminate Deterrence report of The Commission on Integrated Long-Term Strategy, the socalled Iklé-Wohlstetter report. Discriminate Deterrence, which foresees the end of the U.S. nuclear umbrella in Europe, was widely distributed at the Wehrkunde conference "by the Americans," according to the conference administrative office.

Defense Secretary Carlucci's single remark that the Iklé-Wohlstetter report should not be understood as official policy was not credible. His focus on an upcoming oil crisis in the Persian Gulf, Libya and the southern Mediterranean, and Caribean future hot spots was right in line with the premises of the Iklé-Wohlstetter report. This, said, Carlucci, would mean diversion of U.S. armed forces to the "southern flank," thus reducing the "direct support available to the allies."

Report from Bonn by Rainer Apel

Lothar Spaeth's Moscow trip

Spaeth's chancellorship ambitions have found plenty of support among the Soviet leaders.

When Lothar Spaeth, the Christian Democratic governor of the German state of Baden-Württemberg, arrived in Moscow for a five-day visit on Feb. 7, he stepped on a broad red carpet. The high point of his visit was a meeting of more than two hours with Gorbachov on Feb. 9, in the prestigious Catherine's Chamber at the Kremlin. Foreign guests are not often received in this section of the Kremlin.

Soviet media played up Spaeth, with *Literaturnaya Gazeta* taking the lead Feb. 3, portraying him in a halfpage feature as "one who is openly mentioned in Germany as a future chancellor." The journal presented the German politician as a "technocrat and fanatic supporter of scientific-technical progress," as a "pioneer of economic cooperation." *Pravda* emphasized that Spaeth had played a "key role" in rallying German support to the INF deal.

Lothar Spaeth's third trip to Moscow, after earlier ones in 1983 and 1985 had, because of its timing, a very special character.

The invitation to meet Gorbachov was demonstratively conveyed to him in Bonn by Foreign Minister Eduard Shevardnadze on Jan. 19, a few hours after the Soviet diplomat had told Chancellor Kohl bluntly that Gorbachov had "no time" to see him. Moscow's gesture toward Kohl's main rival was intended to signal that Lothar Spaeth is the Kremlin's preferred choice for next German chancellor.

In accepting this demonstrative invitation to Moscow, Lothar Spaeth delivered a heavy blow against Kohl, and the affair was viewed as an "open

scandal" by many here in Germany.

On Jan. 19, the same day that Spaeth received the Soviet invitation, he had conferred with leading industrial and banking managers at his palace in Stuttgart, to discuss "the need for a change of policy in Bonn." Attendees at the gathering leaked that more than just a "change of policy" had been discussed: As the press was told, "Overthrows of ruling chancellors in Germany have always occurred in the context of mounting economic problems." The "ruling chancellor" is Kohl, whose economic policy reputation among industry and banks is the lowest since he took power in 1982.

Under strong attack both from industry and labor, Kohl is also facing chilly winds from Moscow. This is tantamount to a personal political disaster for the German chancellor, who has invested considerable prestige in supporting Gorbachov's INF diplomacy, visibly distancing himself from SDI and nuclear weapons generally. Kohl should have known better, but he is embittered that he, who has done so much for Gorbachov, is kicked in the face now. The fact that Spaeth offered to probe in Moscow for a meeting between Kohl and Gorbachov, only added to the chancellor's humiliation.

The way in which Spaeth's Moscow visit proceeded, indicated that should Gorbachov ever decide to "grant" Kohl a date for a personal encounter, it would happen only with the deepest concessions from the German side. After Spaeth's big kowtows, the Kremlin would open its doors to Kohl only if he came crawling on his knees.

Lothar Spaeth's first official dis-

cussion partner was Deputy Minister President Frikryat Tabeyev, ambassador to Soviet-occupied Afghanistan from 1979 to 1986. The encounter on Feb. 8 was characterized as "very cordial," shedding additional light on the immoral quality of the sister-state partnership signed between Spaeth's state of Baden-Württemberg and the Soviet province of Tadzhikistan in March 1985.

Tadzhikistan borders on Afghanistan's north and plays a key role in Moscow's genocidal war against the Afghan civilian population of the Hindu Kush region. Among other motives rooted deeply in Moscow's traditional imperial racism, there is a strategic aspect in the Red Army's Afghan war: Tadzhikistan's state capital, Dushanbe, hosts a giant new laser radar base for tracking objects orbitting in space.

Thus, when Spaeth offered extended high-tech cooperation with the Soviets, he may have spoken of plans for delivering sensitive electronic parts from Baden-Württemberg to the Dushanbe radar complex. Spaeth's bag of special high-tech offers included computers, electronics, machines, and consequently, he ridiculed the Co-Com ban on technology transfer in his talks with the Soviet leaders.

Topping it off completely, Spaeth assured Eduard Shevardnadze on Feb. 8 that the new Franco-German military cooperation accord was "no cause for irritation whatsoever, a symbolic gesture rather than a step of military importance." Far more important than the planned stationing of a joint Franco-German combat brigade in Baden-Württemberg, he stated, was the INFmandated withdrawal of all U.S. Pershing II missiles from the same state. With appropriate sarcasm, Shevardnadze replied that under such conditions, he could only agree with Spaeth.

Report from Rome by Liliana Celani and Marco Fanini

The last days of Giovanni Goria

An avowed KGB spy sits in Parliament, applauding as the institutions crumble.

government crisis in Italy, what else is new?" will be the first thought of many Americans when, and if, they learn about the troubles of the government of Premier Giovanni Goria, who was defeated Feb. 9 four times in a row during the secret vote on the Finanziaria, the Italian "Gramm-Rudman" budget-cutting bill which has been debated in the Senate for the last two years. On Feb. 10, Goria re-

Indeed, the way the crisis unfolded is not dissimilar from the hundreds Italy has witnessed before: On top of the Communist and Radical parties' opposition to the five-party pentapartito led by Goria, came the secret vote of Christian Democratic "sharpshooters" (who break party discipline from the ambush of the secret ballot).

The sharp-shooters were presumably aiming at replacing Goria with Foreign Minister Giulio Andreotti, who better reflects the present "New Yalta" trend in Europe, since he is a fervent admirer of Gorbachov and a friend of Libyan dictator Muammar Oaddafi.

Right after the October 1987 crash on the world's stock markets, a spokesman for the Italian Confederation of Industry said that Italy needed a "strong government," capable of guiding the economy through tempestuous times. Other top financiers echoed him saying that 1988 would be disastrous for the markets because an "era had ended."

The scenario to replace Goria by a "strong" government, was apparently plotted on the eve of the Christian

Democratic Party's national congress by Andreotti, who has reached a deal with former Socialist Premier Bettino Craxi and the huge Communist Party.

The terms of the deal are not hard to imagine. In an article on the national unity government of 1976-79 which appeared in the weekly Europeo on Feb. 5, Andreotti wrote, "If [then Communist leader] Berlinguer had had the strength (or the ability) to hold fast, overcoming internal pressures, discouraging the march of the metalworkers and taking the defense of austerity all the way . . . Italian life could have evolved differently."

Andreotti's clear bid to try again, was warmly received by the Communists, who are now willing to block not only the metalworkers but every potential striker in Italy. The latest government statistics show that unemployment in medium-sized and big industry (over 500 workers) grew by 3.4% in 1987. Strikes have already begun. The first job of a "strong" government will be to send in the police; the second, to push through a savage budget-cutting bill that no one will dare to shoot down.

The "Christian Democratic faction games"that toppled Goria, giochi di corrente as they are called here in Rome, are nothing new; nor is it new that the government can be easily demolished, since it essentially did not exist. Goria, who took office on Aug. 1, after five years as treasury minister, had only one function: passing as fast as possible the Finanziaria budget cuts, before the financial crash and the chronic problems in the Milan stock exchange get completely out of con-

But something is new indeed. Those Italians who watched the latenight TV news of Feb. 9, and the report on the parliamentary vote which defeated Goria four times, probably lost their sardonic smiles when the TV cameras framed first the Communist Party section of the Parliament (which by itself occupies 30% of the seats) rejoicing at the defeat, and then the Hungarian prostitute Ilona Staller, much hyped as "La Cicciolina," grinning and applauding at this atmosphere of "the last days of Pompeii."

No wonder: In a recent interview with a Lebanese newspaper, picked up by the Italian daily Corriere della Sera, porno-starlet Cicciolina, who sits in the Italian Parliament as a Radical Party deputy, admitted that she was trained in Hungary as a spy, being the daughter of an interior ministry official. In the interview, Ilona Staller recalls that her first KGB missions were to corrupt an African official and an American senator visiting Hungary. The most recent mission the KGB assigned her, apparently, is to deal the final blow to whatever remains of Italian institutions, making sure that it is clear to everyone that the Parliament not only is unable to decide anything about Italy's destiny, but also welcomes KGB whores and spies without even questioning their past.

Italy has been historically a country of great contrasts, but particularly since the Reagan-Gorbachov summit, these contrasts are becoming too striking: The same U.S. ally that was the first to sign cooperation contracts with the Strategic Defense Initiative, which sent six ships to the Gulf to support the American fleet, and as recently as early February had decided to welcome the American F-16 jet fighters leaving Spain, has a KGB spy in its national Parliament.

Report from Rio by Silvia Palacios

Sarney attacks the Vatican

In the face of a Church mobilization against his policy, the President repudiates his Christian debt moratorium.

On Feb. 1, Brazilian President José Sarney published a singularly irrational accusation of "corruption" against the Vatican and the Catholic Church in general. Sarney lost his temper in the face of a Jan. 29 call by the president of the National Conference of Brazilian Bishops (CNBB) for the Church to mobilize against the government's capitulation to creditor banks and the International Monetary Fund (IMF).

The CNBB statement, which will be distributed massively to the world's largest body of Roman Catholics, states, "The national mood is one of frustration. Productive investment has fallen while financial speculation has risen. Unemployment has not diminished; real wages are weakened. . . . Corruption continues with impunity, protected by a tolerance bordering on collaboration." The Church indictment notes, "Externally, creditors demand the payment of unilaterally inflated debts."

It concludes by convoking the faithful to stop financial lobbies from purging Brazil's new constitution of provisions guarding the basic rights of workers and landless peasants. If the regime remains fixated on prolonging its petty corruption and cronyism, it warns, "the popular dissatisfaction could explode and assume convulsive proportions, with catastrophic consequences."

Sarney replied in a virulent public letter. "We all know corruption is a poisonous weed we should fight without quarter. Reverend, note how not even the Holy See can escape its cunning invasion. The Banco Ambrosiano case shows how insidious it is."

Sarney's response hit the press the same day that Brazil bowed once again to its bankrupt creditors by paying them, from its meager reserves, \$350 million toward January interest payments.

The same day, railroad workers struck nationwide for wage increases. Two weeks earlier, the government had announced it would engage in even more savage wage-gouging as part of the austerity policy it is executing to please U.S. Treasury Secretary James Baker III and obtain agreements with the IMF and the banks. "The government is willing to face any strike," Finance Minister Maílson da Nóbrega blustered. "We are going to resist wage demands bravely, with determination and vigor."

The strong-man amidst the shards of the Sarney government, Communications Minister Antonio Carlos Magalhães, called Feb. 5 for "bitter medicine" in the streets.

At press time, the railroad strike had gone on for a week, and in some parts of the country, fuel and industrial inputs were running short. Hundreds of thousands of workers depend on trains to get from the belts of misery surrounding Rio and Sao Paulo to their low-paying jobs. No work, no pay.

It seems that the intention of the patronage brokers who have usurped control of the presidential palace is to let political and religious groups aligned with Moscow go wild riding on the social discontent. When the chaos crosses a certain threshold, their

scenario goes, the radical faction of the armed forces would promptly crush it and entrench the Magalhães clique in power.

It is true that Sarney's tirade against the Vatican was encouraged by the evangelicals, gnostics, and cultists who surround him. It astounded conservative Catholics here, since the Vatican has been trying hard to limit the strong influence of gnostic-Marxist "liberation theologists" in the Brazilian Church, Father Leonardo Boff, the mouthpiece of the Theolibbers, and defrocked priest Frei Betto share Antonio Carlos Magalhães's desire that Brazil move closer to Castro and Gorbachov.

But, on a higher level, it proves the Church's point that "moral sense and civic responsibility are alarmingly eroded." In his Feb. 20, 1987 moratorium declaration, Samey himself said, "Pope John Paul II was very clear. . . . He said that the problem of the foreign debt is also an ethical problem. . . . Indebtedness must not harm the basic living needs of a people." Samey reportedly repudiated that position Feb. 1, asserting, "The foreign debt moratorium was the biggest mistake we ever made."

Finance Minister da Nóbrega and ex-Minister Mario Simonsen (now a Citibank vice president) are campaigning through the daily *Jornal do Brasil* (owned since January by the central bank), using fake statistics to "demonstrate" that Brazil lost \$700 million because of the moratorium.

CNBB President Bishop Luciano Mendes de Almeida was not amiss, when, in presenting the Church document Jan. 30, he stated, "A feeling is growing in the population similar to the Holy wrath when Christ drove the money-changers from the temple."

The question arises: Will they be driven out of the presidential palace?

Dateline Mexico by Hugo López Ochoa

Cultural war on the Church

Pagans encysted within the government are trying to trigger a new version of the 1925-29 Cristero Wars.

On Feb. 3, a score of rifle-bearing police and members of the Public Works Department of the port of Acapulco, removed from its concrete pedestal a bronze statue of San Felipe de Jesús, the Mexican Jesuit missionary martyred in Nagasaki, Japan in 1597. Acapulco Bishop Msgr. Rafael Bello Ruiz immediately proclaimed that the Catholic Church "finds itself deeply injured." He warned that such an act could cause "great disillusionment among the Catholic people," because the government "neither respects their opinions, their freedom, nor their most sacred feelings, which are religious ones."

It was an incident similar to that of Feb. 3 which, in 1925, detonated the religious war known as "the Cristero Rebellion," which lasted until 1929 and in which more than 30,000 Mexicans died. This religious war was caused by the political machine of then-President Plutarco Elías Calles (1924-28), who tried to exterminate the Catholic tradition and institutions of Mexico because they functioned as the principal obstacle to imposition of a fascist regime styled on the Italian model of that time.

Calles was a puppet of Teddy Roosevelt and the Morgan interests.

EIR has reported the Mexican Church's opposition to the murderous austerity program the present De la Madrid government has imposed on the country, the result of its debt negotiations with the House of Morgan and other creditors. The latest provocations against Mexico's Catholics stem from precisely the political heirs of Calles, today headed by Interior Minister Manuel Bartlett Díaz and his deputy, Fernando Elías Calles.

The Acapuico incident was only the latest of a rash of anti-Catholic provocations that have occurred recently.

On Jan. 23, thousands of members of various Catholic groups gathered at the Museum of Modern Art in Mexico City, to protest an "art" exhibit that displayed the Virgin of Guadalupe the image most venerated by Mexico's Catholic majority—with the face of Hollywood "whore" Marilyn Monroe. While the press tried to portray the demonstration as violent, in fact, there was no indication of any violent activity.

It is no accident that the pagan exhibit was authorized by, among others, the deputy secretary of culture of the Public Education Ministry, Martín Reyes Vayssade, who in 1961 was a leader of the Communist Party in Mexico City, and by 1983, was a national leader of the Bolshevik Communist Party, a pro-Chinese splinter group.

To add insult to injury, the pornographic display was held less than one kilometer from another exhibit on the Virgin of Guadalupe—sponsored by Catholic groups.

Museum of Modern Art director Jorge Alberto Manrique, accused the Catholic demonstrators of being "fascistoid groups," and demanded that

criminal charges be lodged against them. On Jan. 27, Mexico's House of Deputies issued a resolution condemning the demonstrators, a resolution backed by various Moscow-controlled parties and by the ruling PRI party. And on Jan. 28, hundreds of "intellectuals and artists" demanded "full application of the law" against the Catholics.

The majority of those same "intellectuals and artists" not surprisingly head up the "greenie" campaign against the opening of the Laguna Verde nuclear plant, and many are acknowledged homosexuals.

In yet another incident, the metropolitan police of Mexico City were deployed to guard the theater of the "Shakespeare Forum," to prevent confrontations between protesting Catholics and a group of lesbians going under the name of "Divas A.C." The "Divas A.C." put on a drama called Concilio de Amor (Council of Love), which is about "lesbians in heaven," and which portrays the Virgin Mary as a prostitute.

On Jan. 25, Mexican Cardinal Ernesto Corripio Ahumada, denounced this pagan offensive, stating that the museum's exhibit "offends the Catholic flock and Mexican nationalism," since it also presents insulting images of the national flag. "The artists are expressing their right to be creative? I am going to take your mamacita and I'm going to put a little pig's face on her and exhibit it. Would you like it? No? And I'm not violating any rights!"

On Jan. 26, Msgr. Genaro Alamilla, president of the Bishops' Commission for Social Communication. went to the heart of the matter. The museum presentation he said, is not art, because "it is at odds with beauty, which is harmony and morality." To be art, he added, it "must show beauty as an expression of truth."

International Intelligence

Occidental offices bombed in Bogota

The headquarters of Occidental Petroleum in Bogota, Colombia were hit by a car bomb at the end of January. The bombing was claimed by the ELN, a guerrilla group that has previously been involved in bombings of Occidental and other pipelines in Colombia.

The Jan. 27 edition of El Tiempo reported that the most serious effect of the bombing is that it signals that the ELN is no longer confining its activities to "inhospitable" regions of the country, but is moving its terrorism from the jungles down into the cities.

Police officials also note that the bombing had a professional character not previously associated with ELN. According to the F-2 anti-bomb unit, they were surprised at the effectiveness of the bombing.

The bomb, weighing about 10 kilos, was activated by remote control at a distance of 70 meters. It was placed in precisely the right position to ensure maximum destruction of its target.

The explosion blew out windows, and various eyewitnesses said that when the night-time blast went off, the scene was so bright that it seemed like daytime. No Occidental equipment or machinery was damaged, however.

Mexico creates foreign policy commission

Mexico for the first time will include top officials from the economic ministries, the banks, and the leading public sector companies in the formulation of its foreign policy. The ruling PRI party on Feb. 9 unveiled a new foreign affairs commission weighted far more toward Mexico's economic interests than similar bodies in the past.

The think tank is sponsored by Carlos Salinas de Gortari, architect of Mexico's implementation of International Monetary Fund policies, and the PRI's presidential candidate for 1988.

The commission will have 70 members, including the chairmen of the four major

nationalized banks, trade and foreign investment experts from the public and private sectors, Mr. Angel Gurría, Mexico's chief debt negotiator, and Adrián Lajous Vargas of Pemex, the national oil company.

London's *Financial Times* commented on the announcement that this is recognition that Mexico's ability to exercise national sovereignty is conditioned by external variables like the price of oil, international interest rates, and the U.S. economy.

Navy exploring base site in Argentina

A source close to the U.S. Navy reports the rumor that a USN Site Evaluation Team was recently in Argentina, presumably looking for a site to base a P-3 Orion Marine Patrol Aircraft detachment.

There is reportedly a major buildup under way at the Argentine naval base at Comodoro Rivadavia, supposedly the fastest growing naval base in the world at present.

The source said that the Argentines—according to rumor—are eager to be America's friends and to become "de facto" members of NATO. The source's own evaluation is that the United States and Argentina "intend serious interoperability and comm connectivity at a very sensitive tactical level."

The source reports that "all of the Argentine military are cordially disposed to the U.S.A.," but that there is "resentment in the Air Force" because an arms embargo is delaying a multibillion-dollar shipment of tactical fighter jets from Israel, for which Argentina has already paid.

Malaysia's ruling party judged 'illegal'

Prime Minister Mahathir Mohamad of Malaysia rejected calls for his resignation at a news conference Feb. 5, after a a Malaysian high court one day earlier ruled that his governing UNMO party was an "illegal organization."

The ruling came in response to a suit by party dissidents who wanted to void the April

intra-party elections, which Mahathir won by 43 votes.

The prime minister told a news conference that, after consultations with political lieutenants, he would continue to head the government without a political party for the time being.

The court ruling created confusion among the 1.4 million members of the UMNO, he said, but as far as he was concerned, he is still prime minister and the "government continues as usual."

Justice Harun Hashim of Kuala Lumpur, who made the ruling, dismissed the petition brought by the dissidents, but by declaring UMNO illegal, gave them more than they had sought. Mahathir had attacked the judge last year for being prejudiced in favor of the opposition.

Meanwhile, Tunku Abdul Rahman, Malaysia's first prime minister and its elder statesman, announced that he intends to form a new Malay party, accusing Mahathir of ruining the party.

Highlight Soviet spetsnaz deployment

Lt. Gen. Gerard Berkhof (ret.) of the Netherlands Army addressed a semi-official closed-door audience in Bonn, West Germany Feb. 9 on the new strategic priority assigned by the Soviet Union to its airborne and special forces operations, particularly if the INF treaty is ratified.

General Berkhof cited documents obtained from the Voroshilov General Staff Academy in Moscow, in which the Soviet military leadership concluded that 15% of key NATO targets, including Pershing II and cruise missiles, could be reliably knocked out by special forces, called *spetsnaz*. Another 10% could be knocked out by airborne forces, and the remaining 75% by SS-20 missiles.

With the Pershing II missiles on Quick Reaction Alert, however, the Soviet command estimated that after SS-20 bombardment and airborne assault, enough Pershing II and cruise missiles would still remain to paralyze a Soviet attack against Western Europe.

Briefly

The Soviet Union "made a good deal on INF," General Berkhof argued, because of their other nuclear capabilities remaining, and because they no longer wanted to rely on SS-20s to knock out targets. If INF is ratified, spetsnaz units will be assigned to destroy far more than 15% of the key targets before open hostilities begin.

With the INF treaty opening the European field to Soviet spetsnaz, General Berkhof said, they would be restructured, and armed with small nuclear, biological, and chemical weapons, and within the foreseeable future, with electromagnetic-effect weapons.

A representative of the American embassy in Bonn asked General Berkhof why, if the picture for Europe after INF is so dark. there seems to be more resistance in the United States to the treaty than in Europe. Berkhof answered that the American representative could only have that impression if he believes the politicians, who are not strong enough to admit that the NATO "Two Track" decision offering to negotiate the Pershing IIs away was wrong. "But if you just step into the back rooms of these same government offices for a moment, you will hear the concern, and the screams of the people tearing their hair out."

U.S. pushing for Gulf security alliance

The Turkish government has been officially approached by Washington and asked to join a regional alliance for the defense of the Gulf of Arabia, report sources in Ankara. They said that Washington asked the Turks to send some military units to Mecca and Medina to help protect Saudi Arabia.

The recent request was made as it became clear that Egypt had no intention of sending an active military force into the Kingdom of Saudi Arabia, At present, Egypt has only military advisers stationed in Saudi Arabia.

The Turkish government has not formally replied to the request, and the Turkish sources stress that the project is in doubt, given that the presence of Turkish troops in Mecca might well not be welcome by the Saudis themselves. Saudi Arabia was once occupied by the Ottoman Empire.

Zambia's Kaunda calls for 'crusade' against poverty

Zambian President Kenneth Kaunda, speaking in Rome on Jan. 27, called for intensified efforts to fight poverty and hunger, adding, "There is no doubt at all that the natural resources that exist in the developing countries are abundant enough to feed the existing populations a hundred times over."

Kaunda was addressing the 10th anniversary conference of the International Food and Agriculture Organization.

He called for North-South joint ventures in the developing sector. "Where these exist," he said, "they have shown that our human and natural resources can be developed to the mutual benefit of both the developing and the developed world."

Crocker claims Cubans to withdraw

Assistant U.S. Secretary of State Chester Crocker, just back from Luanda, Angola, is claiming that an agreement has been reached on the withdrawal of the 40,000 Cuban troops now stationed in Angola. Asked about reports of continued heavy fighting in Angola, including a siege of one city by Dr. Jonas Savimbi's UNITA guerrillas, Crocker said that there was an "element of realism entering in on many sides, including the Cubans."

He also said that there was, intrinsically a "linkage" between the Cubans leaving Angola and the South Africans pulling their forces out of Namibia. He said this linkage was "confirmed as a reality. . . . It is not a legal principle, but a political reality."

South African Foreign Minister Pik Botha has attacked the Crocker mission, saying it "served no purpose." He said that the United States, because of its attitude toward South Africa, had "lost all influence," and was acting with "unreliability and vindictiveness."

- BAVARIAN and East German officals have met to discuss a joint fight against AIDS, and on Feb. 23, an agreement between West German state of Bavaria and East Germany to cooperate on research and treatment of AIDS will be signed in East Berlin.
- MEXICAN presidential candidate Carlos Salinas de Gortari met for one hour with Henry Kissinger on Feb. 9, after which the press was told only that "they spoke on themes of common interest."
- KURT WALDHEIM, the Austrian President, was found "knowledgeable in general terms," but not guilty of war crimes in the final report of the international historians' commission that has been investigating the charges against him. Members of the commission at a press conference in Vienna Feb. 8 said that their investigative work had not yielded any document proving that Waldheim actively participated in war crimes against civilians while serving in the German army during World War II.
- PROF. JAKOB SEGAL of East Berlin accused American AIDS scientist Robert Gallo of artificially creating the AIDS virus while working in the U.S. biological warfare program at Fort Detrick, Maryland. Segal delivered an address in Frankfurt at the invitation of the West German Group of Democratic Physicians. "Gallo is lying" in respect to where the virus originated, he said. Gallo's work on viruses was already very advanced in 1974, said Segal, but "oddly enough, suddenly the reports on his work stopped."
- PORTUGUESE Prime Minister Cavalão Silva will visit Washington Feb. 24 for an official working session with President Reagan. The agenda is to included U.S. military aid to Portugal and the future of U.S.leased bases in the Azores.

PIR National

Senate partisan chaos stalls INF ratification

by Webster G. Tarpley

Scarcely two months after it was signed at the Reagan-Gorbachov appeasement summit, and three weeks into the process of Senate examination, the INF treaty is in serious trouble. Ratification is not ruled out, but it is certainly much more remote than it appeared. As was inevitable and predictable, the passage of the treaty through the Senate has become embroiled in the partisan passions of the presidential election campaign—the same passions which have otherwise virtually paralyzed the legislative branch. The INF is being transformed into a political football, and is beginning to take a real beating.

Opposition to the INF and its promise of a decoupled Europe and thus of Soviet world domination still has very little principled character, even though the dissection of the treaty has revealed that its provisions are a tissue of treason. Rather, the weakening of the INF has everything to do with the collapse of the presidential campaign of George Bush. It is now clear that, sometime during the week preceding the Iowa caucuses, a cabal of Democratic Party intriguers including Senate Majority Leader Robert Byrd and presidential crypto-candidate Sam Nunn began to pick up the harbingers of Bush's downfall, and concluded that the Democrats have an excellent chance of picking up the White House in November. They therefore made their obvious move, namely, to begin building a case for blocking INF ratification, with various subterfuges, until after the presidential contest is over. It was always doubtful that Byrd and Nunn would allow speedy passage of the INF, thus giving Reagan and Bush a splendid diplomatic triumph. With Bush's White House bid disintegrating, the Republican beneficiary of ratification would be none other than Byrd's and Nunn's Republican in-house adversary, INF backer Bob Dole. Delaying actions by Byrd, Nunn, and company are therefore guaranteed. More broadly, Byrd and Nunn, now scenting Democratic victory, will tend to use Democratic control of the Congress to wreck every Reagan administration initiative, making the White House look impotent and contemptible while the Democrats seize the initiative to showcase their key programs.

It is significant that Byrd and Nunn also are seeking to extract concessions from the administration precisely at the point demanded by Moscow—the final destruction of the Strategic Defense Initiative. The Byrd-Nunn gambit that emerged during the first week of February attempts to let the Soviets have their cake and eat it too—by forcing a coup de grace against the agonizing SDI in exchange for the INF ratification the White House so pathetically desires. Over recent weeks, it turns out, Byrd and Nunn have been holding secret negotiating sessions with Secretary of State George Shultz around the senators' demand that the administration accept their thesis that Senate testimony given by administration officials during treaty ratification hearings is authoritative and legally binding, even if it is not explicitly cited in the Senate ratification resolution.

The principle asserted by Nunn and Byrd is absurd, since it would deprive a future President of the right to reinterpret a treaty in the light of profoundly altered future circumstances—such as, for example, the progress in relativistic beam research that would now make an anti-ballistic missile defense eminently feasible as compared with two decades ago. Byrd and Nunn demand that the U.S. interpretation of treaties be cast in concrete, imposing far more restrictions on U.S. behavior than the Soviets will be required to accept—an intolerable infringement on future Presidents' rights.

But Nunn and Byrd are not merely concerned with congressional micro-management of the Executive. Their specific target in the here and now is SDI. The Byrd-Nunn gambit demands that the administration abandon the 1985 opinion of State Department legal adviser Abraham D. So-

faer to the effect that the 1972 ABM treaty can be read as permitting realistic testing outside of the laboratory, including in space—the so-called "broad interpretation." Nunn has asserted that the 1972 testimony of such Nixon-era officials as Kissinger and Melvin Laird during the ABM ratification hearings rules out all but the narrow construction—that is to say, confirms the Soviet view that the United States may not test outside the laboratory.

By about Feb. 1, Shultz was more than ready to preclude all SDI testing and thus sell out the program in exchange for a pledge of speedy INF ratification by Byrd and Nunn. Shultz was in fact about to forward a letter to the Senate Democrats granting them all their demands.

Enter at this point a group of Republican senators, including Lugar, Pete Wilson, Wallop, Quayle, Specter, and Simpson. Some of them support the INF, but all also support the broad interpretation of the ABM treaty. Even in this regard, their motivation is more partisan than patriotic, as Simpson himself conceded.

These senators obliged Shultz to postpone his capitulation. Shultz forwarded to Byrd a letter stalling on the desired concessions, and appended the 30-volume transcript of INF negotiations with the Soviets.

Nunn and Byrd thereupon flew into a rage, and sent to Shultz a letter bristling with threats against INF ratification. Byrd and Nunn informed Shultz that his reluctance to surrender on SDI would lead to "inevitable delay" in the Senate, since the INF record would have to be "exhaustively" reviewed. The Senate would have to take the time necessary to write its own exposition of the treaty's meaning. There would also be "understandings, reservations, and amendments addressing every point of the interpretation." For the moment, said the two confederates, Nunn's Senate Armed Services Committee would refuse to hear any more administration witnesses until "this impasse" had been solved. With that, Byrd and Nunn adroitly decamped to the Wehrkunde conference in Munich.

Over the next few days, the State Department became frantic at the prospect of an INF treaty dead in the water, and all further New Yalta talks with Moscow blocked. By the following Tuesday, Feb. 9, Shultz had obtained the approval of Simpson for a letter to Byrd and Nunn promising that, at least as far as the Reagan administration is concerned, the interpretation of the INF treaty offered to the Senate will be binding. Nunn and Byrd, by that time in gay Paris, sent back word that they would no longer delay the hearings, although Nunn also spoke of the possible need for "some sort of reservation" to write Shultz's momentary concession into permanent law.

Senators Wilson and Quayle pointed out that Shultz had made no concessions on the SDI. But precisely this point was too much for Sen. Joe Biden, the number-two Democrat on the Senate Foreign Relations Committee. Biden, joined by Foreign Affairs Chairman Claiborne Pell and perhaps other Democrats, announced that although Shultz's concessions

might be good enough for Byrd and Nunn, they were certainly not good enough for him. Biden accordingly confirmed his mooted intention to block INF ratification unless and until the administration drops its claim that ratification testimony is not eternally binding on the Executive. We may thus witness the refreshing spectacle of Biden teaming up with Jesse Helms to strangle the INF.

This Biden amendment has been editorially endorsed as a "remedy" to the "treaty trap" by the New York Times. The Washington Post takes a different tack, ironically suggesting that the treaty may already be doomed, and calling for a suspension of the INF debate for as long as it takes to clarify the ABM treaty interpretation issue. According to this same paper, Senate Republicans are "seething" over the turn of events so far, and one GOP aide comments that "the administration had a chance to slam-dunk Sam Nunn and lost it." Another aide notes that the State Department has "seized the opportunity to anger everyone . . . and has taken us back to Square One without really resolving anything." Senators predict that the Byrd-Nunn-Shultz haggling will "open the floodgates" for new amendments and reservations. Sen. Arlen Specter (R-Pa.) says, "My fear is there could be a chain reaction. . . . It gives treaty opponents an opportunity to raise problems and then blame the other side."

'Killer' amendments in the works

Numerous amendments beyond Biden's are in the works. Sen. Larry Pressler (R-S.D.) wants an amendment that will force the Soviets to reduce their overwhelming conventional advantage before the INF treaty becomes operative. Senator Helms may offer an amendment calling for the destruction of the nuclear warheads and guidance systems taken off the INF missiles so that the Soviets will be unable to mount the old warheads on new missiles. A full-page ad in the Washington Times by Howie Phillips of the Conservative Caucus has nailed George Bush for blatant lying on this score, since the vice president had argued that "the Soviets will destroy four times as many warheads as the U.S.," while the treaty in reality exempts all warheads from destruction.

Even the slimiest voices are now arguing for amendments which, in practical effect, could kill the treaty. Jeane Kirkpatrick judged that the INF accord will leave "Europe somewhat more vulnerable, the Soviet Union somewhat less vulnerable, and the alliance somewhat weaker," but nevertheless told the senators to go ahead and ratify it. But she did recommend an amendment for "automatically terminating the pact in the case of non-compliance." Texas Republican Phil Gramm has announced his intention of offering such an amendment.

Then there is the case of Richard Perle. Perle says that the treaty is "sound" and should be ratified, with no killer amendments. But, says Perle, "I believe that the Senate role in the consideration of treaties should entail more than a selection between a rubber stamp that says 'yes' and one that says 'no'. . . . I take particular exception to the notion that

any amendment or reservation that requires further negotiation or consultation with the Soviets is bound to kill the treaty." Perle therefore recommends one amendment stating that Article XIV (the so-called non-circumvention clause) is devoid of meaning, and another amendment exempting the conventionally armed ground launched cruise missile from elimination. Although Perle vehemently denies that these are killer amendments, he is in effect fashioning an escape hatch for himself—from the INF conveyance which he did so much to set in motion. Article XIV is sure to be the target of an amendment, probably from Sen. Dan Quayle. This article states: "The Parties shall comply with this treaty and shall not assume any international obligations or undertakings which would conflict with its provisions." "What is the purpose of this language," Quayle demanded to know at the outset of the hearings, and suggested that it may seek to block U.S. technology sales to European NATO nations.

The official State Department reading is that Article XIV is meaningless "surplusage" which adds nothing to the other provisions of the treaty. But it is an axiom of international law that all treaty articles must be assumed to have been added for a reason. Help in exegesis has been supplied by Muscovite plug-uglies like Shevardnadze and Yazov, who have stated that Moscow will tolerate neither measures to increase NATO battlefield nuclear weapons not covered by the treaty, nor the strengthening of NATO conventional defense, nor more British and French missiles, nor anything else that might compensate for the weakening of the West by INF.

Soviet loopholes

Article XIV is a true leap in the dark for the United States, and points to the existence of secret protocols to the INF treaty that the State Department is hiding from the Senate. In addition to Jesse Helms's memorandum on the INF accord, a group led by former acting Assistant Secretary of Defense Frank Gaffney has also published a detailed line-by-line analysis of the accord text. What emerges is indeed a tissue of deliberate treason, replete with loopholes and escape clauses, stacked and loaded in favor of our enemies.

To summarize some of the leading points:

- Although the Soviets admit to possessing 650 SS-20s, they have unquestionably concealed the existence of many more. For each transporter-launcher-erector (TEL), the Soviets like to have 5 to 6 missiles, including reloads. Since about 441 TELs have been detected, total SS-20 production may be in excess of 2,250, of which some 1,500 could remain hidden until the Soviets perhaps choose to disclose their existence in a "surprise party" of blood-curdling threats to Europe.
- Under treaty provisions, the Soviets can keep their ground-launched cruise missiles by simply asserting that they are unarmed drones.
- In addition to the fact that Soviet warheads will not be dismantled, the Soviet SS-20 missile launcher vehicles (TELs)

- the treaty purports to "eliminate" are merely subjected to having a part of the transporter vehicle chassis, "at least 0.78 meters in length" cut off "aft of the rear axle." For the SS-23, 0.85 meters is to be cut off aft of the rear axle. For the U.S. Pershing 2 and Pershing 1A, by contrast, the launcher chassis must be cut into two equal parts.
- The INF accord classified missiles only according to the maximum ranges at which they have allegedly been tested. This ignores the fact that Soviet ICBMs are routinely tested in an IRBM mode, and that the SS-25, SS-24 or other Soviet ICBMs can easily be retargeted on Western Europe.
- The entire verification regime is vitiated by the fact that the Soviet SS-20 IRBM is part of the same modular missile family that includes the SS-25 truck-mobile ICBM and the SS-16 ICBM. The first stage of the SS-20 and the SS-25, in particular, are virtually identical. SS-20s can easily be hidden in the slightly larger launch canister of the SS-25. At any time that U.S. inspection procedures have identified an illegal SS-20, the Soviets can claim that it is really a legal SS-25.
- Any inspection is made almost impossible by the fact that the photos the Soviets have provided of SS-20 and SS-23 are obvious forgeries. The SS-20 is kept in a canister, which is equipped with heaters and an inert environment which the Soviet technology requires to protect the missile. The SS-20 is like a cigar in a metal tube, and no likeness of it is available in the West. The Soviets have never furnished engineering specifications of the SS-20 and the other missiles, so that among other things it will be impossible to distinguish battle-ready missiles from the supposedly inert training missiles the Soviets are allowed to keep, or the missiles they will be allowed to keep on "static display."
- The counting rules contained in Article VII, Section 10 have been stacked in favor of the Soviets. For the Pershing 2, the longest stage of the missile already counts as a complete missile. For the Soviet missiles, the launch canister or the complete assembled missile is counted. This opens the possibility, sure to be exploited by the Soviets, that SS-20s could be separated into at least two stages and stored to be later reassembled.
- The same counting rules mean that U.S. perimeter-portal examinations take place at the empty assembly plant at Votkinsk, whereas the Soviets are allowed to inspect outside the Hercules plant at Magna, Utah, where modern U.S. missiles are still being assembled. The U.S. is forbidden to inspect any container smaller than 16.5 meters, whereas the Soviets can demand to inspect anything down to 3.7 meters, since that is the length of a Pershing 2 first stage. U.S. inspectors traveling in the U.S.S.R. will be at the mercy of their hosts for hotel rooms, meals, and even telephones. If they cannot provide their report in English and Russian two hours after their work is completed, they will have violated the treaty. One section even manages to undermine U.S. rights in East Berlin. All of this is clear without having reviewed the "equally authoritative" Russian text.

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LaRouche to high school students: Look to the future, colonize space!

Democratic presidential contender Lyndon LaRouche, Jr. was invited to speak on Feb. 5 at Memorial High School in Manchester, New Hampshire. He began his address to 500 students with a discussion of the financial crisis, making the point that the financial bubble that is now bursting is bigger than that of the 1930s, and therefore the crash will be deeper, if it is not stopped. He then asked his audience to forget for a moment the depression, the dangers of war, the problems of our world, and to think instead of what problems the next President should be solving, what challenges the next generation will have to overcome. The following are excerpts from that portion of his talk, and from the lively discussion that followed.

. . . Now, my problem is this: As President, my job is to do everything government should do to ensure that U.S. industry has the most advanced technology in the world available to it, as rapidly as possible. There are two sides to this: One side is to make the technologies available; the other side is to make sure we are supplying cheap credit, and investment tax credit incentives, to make sure these technologies are used.

My problem is: Knowing what the areas are in which scientific progress will be determined in the next 50 years, how could I put all of this in one package, so that—in terms of international cooperation among governments, with our government, and in cooperation between the private and public sector—how could we be sure, that we would be generating these technologies as rapidly as we need them?

So, back some years ago, back in 1985, I had the occasion, at an international conference in Virginia, to present a paper in honor of one of the United States' space pioneers, a friend of mine, Krafft Ehricke—he died a year earlier. And, Krafft, among his many projects, developed the industrialization of the Moon project for the United States—for NASA, and for General Dynamics, and others. And, so I thought it was appropriate, because Krafft had always wanted to do that, to define our exploration of Mars, which is what the immediate objective of exploring the Moon is: to get a stepping-stone to Mars, and beyond.

So, I defined a Mars-Moon colonization, industrialization project, to accomplish the mission of establishing a permanent, manned colony on Mars beginning the year 2027.

The President's Space Commission, about 12 months later, made exactly the same general proposal, but proposing somewhat different specific goals, and objectives, but also selected the year 2027, as the target year for the beginning of the permanent colonization of Mars. Just the same way that President Kennedy proposed the end of the 1960s, as the date for Man landing on the Moon—we reached it.

Starting colonies on Mars in the year 2027—from today—is just as feasible as putting a man on the Moon, in the course of the 1960s. It's just a bigger project, more longrange, but exactly the same method of approach, and the same kinds of benefits.

I'll give you a couple of examples of what this means. I'll give you another shock, but those of you who are studying physics, or something like that, can work this out for yourself.

How are we going to get up there?

I don't like the idea of human beings traveling around a long time in space, at microgravities, or fractional gravities, and, since we have not determined yet the effect of keeping human beings in these conditions for extended periods—though we know they're dangerous. I say, all right, let's do the smart thing! In traveling between Earth orbit and Mars orbit, let's go at a constant acceleration of one gravity. That would mean, and you can figure it out for yourselves, that one gravity of constant acceleration, or deceleration on the down-side of the trip, means that the average time to move from the orbit of the Earth, to the orbit of Mars, will be two days.

Now, the question is, how do you get up there? This will use a unit which will have 1 terawatt fusion power propulsion. It's a system on which we're already working. Now, how do we get up there, from Earth? Well, the shuttle is not a good idea. Krafft Ehricke and others opposed the shuttle back in the early 1970s, not because it doesn't work, but for two reasons: First of all, it's too dangerous. There's nothing you can do to eliminate the fact that these things are dangerous—that is a big bomb, those rockets, each one of them. Secondly, it costs too much. The cost of getting a pound of payload into space is too much. And, we already knew at the end of the 1960s how to build a better system. But, the way

government works, they say, "Well, let's go with the practical thing we've got on the table now, instead of building something better!" And that was a big mistake, and always is a mistake on the part of government. When politicians start talking about being practical, hold on to your wallets!

Instead, we develop what's called the Sanger Project. Sanger was another famous space scientist, and the design was as follows: We can build a special kind of jet, it's called a scramjet. A scramjet is about the size of a Boeing 707, and takes of flike an ordinary airplane. It gets up to about 150,000 feet, and is hitting then, a speed of eight times the speed of sound. It goes up a bit further, and out from underneath that scramjet comes a shuttle craft—a rocket shuttle craft—which goes up to what's called Low-Orbiting Position. And, in Low-Orbiting Position, we build a low-orbiting space station. We assemble parts at the low-orbiting space station, we build space tugs, which we already have designed; we move the space tugs, then, out to 22,000 miles, approximately geostationary orbit—and there we begin to build, by these shuttle trips, a permanent space terminal. From that, we move into moving to the Moon—this time, to industrialize

Now, we've gotten a cheaper way of getting a ton of payload into geostationary orbit. That's our first objective. That's the first project, which must go on now; it must be completed during the 1990s. I have the designs for it, from the scientists who worked on them. I decided I liked them. I'm going to go with it!

Remember that the problem with the rocket is, the major component of weight of fuel of a rocket is oxygen, using oxygen to push up through the atmosphere. What's in the atmosphere? Oxygen! Why do you have to carry oxygen through the atmosphere? Use an aeronautic principle, and get above the atmosphere by these methods, and you have a tremendous saving in cost.

Then, we get to the industrialization of the Moon; we produce most of the weight on the Moon. Spacecraft for travel to Mars will involve about 200 passengers each, flying in flotillas of five, taking an average trip of two days or so, to get there. The freight we require on Mars will go in large ships, powered by the same 1 terawatt propulsion system, which will be the size of supertankers. They will carry the freight, they'll be unmanned; with that, we will simply put into place the materials to build the first controlled Earth-like environment on the surface of Mars, and that begins colonization.

You have to be able to think

Now, this means that for you, a higher percentage of you than during the past 20 years will be going into science and engineering. This means that the teachers of the future, of the next generation, will be preparing to teach classical subjects, with an emphasis even greater than that which was characteristic of schools back before 1968, and 1963. This

means that where New Math has been the curriculum today, it will be junked, and we will go back to geometry, especially projective, and other synthetic geometry—constructive geometry. It means that the study of the classics, the study of tragedy, the study of literature will be at a premium. It means that tests which are based upon multiple-choice questions, will no longer be considered qualifying tests for diploma credits, that you have to be able to write an essay, which is competent and literate on the subject on which you are asked a question, as part of your testing, to prove that you can think, and project your mind in a coherent way. You don't have to be perfectly thinking, but you should be able to think.

We will need teachers, scientists, engineers, and people who will go into factories, as operatives, not like the old shoe factories, and so forth, we have here, but to work on new kinds of jobs, which will be, technologically, at the level of engineering employment today. And that's your future. I don't think you'd like to think about any other.

So, let's get to the questions!

Reform of the banking system

Questions covered such topics as the AIDS epidemic, economic policy, charges of credit card fraud against La-Rouche associates, and how to stop terrorism. Here is La-Rouche's reply to one on, "How do you plan to rehaul the banking system?"

Very simple. You see, in my view, Roosevelt proposed a couple of good things back during the war, particularly for what we call today the "developing sector." What happened at Bretton Woods between '44 and '46, and what has happened since, has been the biggest piece of stupidity in monetary policy imaginable, particularly since we already made those kinds of mistakes before in the Versailles monetary system, before we got the Great Depression and Adolf Hitler. So, we're repeating the same mistakes.

Now, the problem is this. Do not assume that governments are intelligent, just because many people in government are, personally. When government, particularly this government, and this Establishment of ours gets a bone in its head, it won't quit until it gets smashed in the head.

The problem has been, we're in the wrong monetary system! We've been preaching it, the press has been preaching it, debating it; people are still debating balancing the budget, which from an economics standpoint is stupid—it means cutting social security, that's what it means. So that what happens is, the Establishment and government finds itself in a crisis, it gets down on its knees and says, "Somebody save us, we've run out of solutions."

And, then you're able to do what I'm proposing to do. What I'm proposing to do, even though it's the right thing to do—I could have all the evidence going for me, on all points, as I have had for 20 years—but, it's not going to happen until a crisis comes along, and these boneheads decide they need an alternative.

Eye on Washington by Nicholas F. Benton

Iowa reshapes Republican race

The Feb. 8 Iowa caucus results came as no surprise to readers of *EIR*. Webster Tarpley's article in the Jan. 15 edition forecast that Vice President George Bush could be mortally wounded in Iowa by coming in third behind Robert Dole and Pat Robertson

What is occurring is more than the demise of Bush. It is also an early sign that the traditional tug-of-war within the Republican Party between liberal Eastern Establishment and the conservative, grass-roots voter base of the party, will again characterize the fight for the party nomination this year.

In reality, two fights are going on in the Republican Party. One is between Dole and Bush over who will be the standardbearer for the Eastern Establishment faction. The other is over whether or not the conservative wing can get its act together to forge a credible challenge to the establishment for the nomination.

Robertson's strong showing in Iowa, followed by an impressive Kemp showing in New Hampshire, will prove that this conservative wing is coming to life. The question, then, simply will be whether Kemp can cut it as the candidate for this wing of the party. Under these conditions, realizing that Robertson can't pull the party together and win the general election, Robertson supporters may gravitate toward Kemp.

The Eastern establishment's theme will be austerity (whether it be the burden of the phony Reagan "recovery"

and 1988 recession on Bush, or the "root canal" budget-balancing policies of Dole), whereas the conservative theme will be anti-austerity, as Kemp has stressed by focusing on new steps to stimulate recovery, such as a return to the gold standard, lower interest rates, and no cuts in Social Security.

The battle lines will also be drawn on the INF treaty. Both Bush and Dole are for it (despite Dole's attempts to waffle somewhat in New Hampshire). Kemp is against it.

If the conservative wing stays viable going into the final primary in California June 6, then we may see a repeat of the 1964 Republican race when Goldwater came from behind to knock out Rockefeller on the last day.

Analysts agree: recession in 1988

"There is a general consensus now among economic forecasters that there will be a recession in 1988," James W. Christian, chief economist of the U.S. League of Savings Institutions, told this reporter at their "Economic Outlook Conference" here Feb. 8.

This is deadly news for the backers of the Bush-Dole wing of the Republican party, who counted on being able to forestall the crash until after the November election.

Forecasts vary, Christian said, on when the recession will hit. This will help determine when Bush (or Dole) is dumped. If sooner, the Republican Party will do the dumping, before they choose their candidate. If later, the electorate will drag their party down to defeat in the general election.

Christian told me that he predicts the U.S. economy will definitely experience a so-called "growth recession" in the first quarter of 1988. This means that the growth of the economy will slow to almost zero, before starting up gradually.

How does he think it will start back up? Christian admitted under intense cross-examination from this reporter that this was based mostly on wishful thinking. "I predict it will be a consumer-driven rebound," he said. Asked how that could be, given that record buildup of inventory stockpiles threatens new unemployment, which will scare consumers out of buying anything, he could only shrug.

Another speaker at the conference, Steven Marris of the Institute for International Economics, said he was "definitely predicting a recession for 1988," which, he said, would hit in the summer and be "very severe."

He said that it will come as an "externally generated" recession. It will result from another six months of improved, but still deficit, trade figures. "At first, a slight improvement in the trade balance will encourage everyone," he said, "but after a few months, it will begin to sink in that, while the figures are a little better, there will still be a huge monthly deficit."

Then, he said, "You will experience three factors occurring simultaneously. Interest rates will be up. Inflation will be up. And the dollar will be driven down by external forces. The three elements in combination will bring on a recession, and it will come quickly, be very nasty, and very rocky," he said.

Asked whether it would be possible to avoid this by political decisions to, for example, keep interest rates down even if it contradicts economic wisdom, Christian said, "That won't be possible. The whole world monetary system is so fragile now, that the slightest false move, and the whole thing could unravel with lightning speed. Political fixes to postpone negative economic trends until after the election are impossible now."

Why the Senate must reject INF: a German military leader's view

by Brig. Gen. Friedrich Wilhelm Grunewald (ret.)

The author is retired from the German Air Force and serves as vice-chairman of the "Patriots for Germany" party in West Germany.

The U.S. Senate has now begun its hearings on the ratification of the INF treaty—also known as the "double zero option." The governments of the NATO member countries, with the exception of France, have almost euphorically celebrated this treaty as the first concrete disarmament treaty. The government of the Federal Republic of Germany is particularly prominent in this regard, although there are individuals within the coalition parties and important editorialists in the major news media, who have raised urgent warnings. When considering the official statements of representatives of the Federal Republic, you should keep in mind, that there are state elections this year in Baden-Württemberg and Schleswig-Holstein, the outcome of which may be decisive, both for the strongest party in the federal coalition, the CDU, and for the future generally.

Other personalities, who have been either skeptical or have warned of the dire consequences of this treaty, cannot be ignored either: the Democratic presidential candidate Lyndon LaRouche, as well as the former U.S. Secretary of State, Henry Kissinger, from the United States; in France the Socialist President Mitterrand and the conservative Prime Minister Chirac.

The crucial question to be asked in judging the treaty, the question which ultimately requires a political answer, is whether, under the real and present conditions, this treaty brings our world more international security and more individual freedom, or not. There is no one, and there is no institution, empowered to answer this question frivolously, or to answer it merely from the standpoint of possible electoral results.

All expert and qualified observers of global strategic developments ought to have been perplexed at the main argument of the adherents of this treaty: This treaty is supposedly the first successful accord with the Soviet Union not only on

a real disarmament—the destruction of medium-range missiles, but not including the destruction of the warheads they carry—but beyond that, this is supposedly the first time that the Soviets have agreed to an unequal solution.

Why are the Soviet Russians concluding a treaty allegedly to their disadvantage, at a time when the so-called capitalist West appears to be on the verge of the predicted economic, and thus also moral and political collapse? The signing of the INF treaty followed "Black Monday."

The weak economic performance of the Soviet Union itself—ultimately one of the reasons for the high-risk operation known as perestroika—cannot be the explanation. We know from diverse sources, that the East is continuing unabated with its new development of weapons- and space-systems. The argument commonly heard in the West, that the Soviet Union wants to spend less on armaments, proves to be nothing more than Western wishful thinking. We can also rule out the suggestion that the Soviet Union is fundamentally giving up an offensive political strategy aimed at what Gorbachov calls "world socialism" in his book, Perestroika. There is not a shred of evidence from ongoing Soviet diplomacy in all crisis areas in the world, particularly recently in Europe, that there has been a change in Soviet political strategy. Mere shifts in political tactics are irrelevant as evidence when we are dealing with treaties fundamentally important for the future of the world.

My argument with respect to the INF treaty is as follows: This treaty is to the advantage of the Soviet Union, globally, and particularly for the region of Europe which is so decisive for the Soviets themselves, and it is disadvantageous for the West.

I will attempt to explain.

At the very latest, with the Khrushchov Berlin ultimatum of Nov. 27, 1958, and the fact that this ultimatum could not be imposed against the will of the Western powers, it became clear to the leadership of the Soviet Union that with the sole strategic factor at their disposal, that of military might, they could not, or could no longer, impose their demands directly.

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Since the beginning of the 1960s, the Soviet leadership therefore developed a multi-dimensional, and thus indirect strategy, a strategy which exploited the strengths of their spheres of power as well as the weaknesses of their adversary—the free industrial countries and the non-communist developing countries—in order to achieve their political aims, unchanged since Lenin and his predecessors, the Russian czars, i.e., Russian world domination or the "Third Rome." It is fundamental to all strategy to achieve one's aims without endangering oneself at the same time, in this case endangering the existence of the Soviet Union. Unfortunately, the West has either not exploited, or exploited only ineffectively, the weakness which lies in this Soviet strategy, for example, to achieve rights to self-determination and human rights among those peoples imprisoned by Moscow since the end of World War II. An important tenet of this indirect strategy is regionalization. This signifies a military constellation which allows the Soviet Union to threaten the homeland of its adversary directly—the North American continent—but from a clearly delimited geographical area, far away from the Soviet motherland itself.

What the Cuban Missiles Crisis was about

Thus, the attempted stationing of Soviet medium-range nuclear missiles on Cuba. The mutual capability already existing at that time, to hit the respective homeland areas with strike and counter-strike, was decisive for the solution of the Cuba crisis. The solution, however, did not consist only in the Soviet Union's withdrawal of nuclear-armed mediumrange missiles from Cuba, but also in the American withdrawal of medium-range missiles from Turkey and Italy, as well as the withdrawal of MACE—the early ground-launched cruise missile—from the Federal Republic of Germany. The MACE was capable of reaching the western part of the Soviet Union with one nuclear warhead, and had sufficient penetrative ability relative to the defense capabilities at that time.

Those who claim today, that the INF treaty is the first concrete disarmament accord between the Soviet Union and the United States, are well advised to reexamine the correctness of their claim in view of the solution to the Cuban Missiles Crisis.

Soviet 'regionalization' strategy

This is not the place to discuss in detail the many attempts of the Soviet Union to activate the strategic principle of regionalization by means of indirect operations, modern irregular warfare/low-intensity conflict, "peaceful coexistence," through to the formal changes introduced by the Communist Party of the Soviet Union Congress in the summer of 1987. But I will have to come back to Soviet operations in modern irregular warfare, because these were crucial in order to prepare Western populations for the INF treaty, pave the way for its acceptance, as well as its potential exploitation

following its ratification, which unfortunately cannot be ruled out, at least in the West. The next significant attempt at regionalization by the Soviet Russian leadership was the introduction of the SS-20 medium-range missile. As a consequence of its limited range and its deployment in the Soviet Union itself—presuming that Western intelligence on this point is accurate—the SS-20 did not represent an immediate threat to the North American continent, with the exception of Alaska. Before the United States stationed the Pershing II and the new ground-launched cruise missiles in Europe, the Soviet Union had the strategic option of limiting its nuclear threat to Europe or Japan, and in a way which was credible to the U.S. leadership. In other words, by means of the SS-20, the Soviet Union could compel the U.S. leadership to make a choice between the physical integrity of its homeland and defense against a threat to its alliance partners in Europe. With this option, achieved by the Soviet leadership by procuring a weapon system aimed at just that result, the Soviet leadership would be able to test the firmness of NATO's will to defend, and thus insert the wedge to politically decouple Europe from the U.S.A.

The Federal Chancellor at that time, Helmut Schmidt, recognized this danger to NATO, and called for a strategic counterweight, the stationing of American nuclear mediumrange missiles in Europe, which would be capable of reaching targets within Soviet territory from their European deployment areas. The range of the Pershing Ia already stationed in Europe at that time was not sufficient for that purpose. Just how important the political option, which the Soviet leadership won with the SS-20, was, became evident following the NATO resolution in Reykjavik on Dec. 12, 1979, the socalled "Two Track Resolution." The Soviet Union chose not to make use of the opportunity offered, to reduce or remove the SS-20s—to the contrary, they decided to continue the deployment already begun. At the same time, they mobilized their communist networks in the free nations of Western Europe to initiate a so-called peace campaign, with the aim of activating public and published opinion among Europeans against the NATO armament decision. In addition to the demonization of nuclear weapons which was already far advanced, which had, after all, provided a stabilization for the division of Europe agreed upon in London in 1944, the Soviets promoted a wave of anti-Americanism, particularly among youth, and practically attempted to prevent the deployment of U.S. medium-range missiles with a large number of operations. At that time, Soviet operations were not crowned with the success they had hoped for. The governments of most European NATO member states were able to have the stationing of U.S. medium-range missiles approved in their parliaments. The Defense White Book 1983, The Security of the Federal Republic of Germany, asserted that "American nuclear weapons in Europe are the indespensable connecting link between the conventional armed forces in

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Europe and the nuclear-strategic American potential."

The imminent neutralization of the Soviet medium-range weapons by U.S. medium-range weapons then compelled the Soviet leadership to change its policy toward the West, especially its disarmament policy.

While the Soviets had exploited their bilateral arms-control policy up through SALT II in order to have treaty approval for their strategic build-up, under the umbrella of agreed ceilings, they had to take account of two strategic developments.

- 1) The increase of their nuclear potentials had not yielded any new political options.
- 2) The increase of their nuclear potentials in fact reduced the political significance of their conventional superiority. In addition, they began to view the option of waging nuclear war over Europe as no longer useful, contrary to earlier thinking. Gorbachov says in his recent book, that such a war would destroy all of Europe.

The threat to Europe, which represents the immediate goal of Soviet policy, was counterproductive. This appears to be one reason for the shift in Soviet political strategy. The shift itself appears to be certain.

Another reason was most likely the announcement by President Reagan that offensive nuclear deterrence would be transformed into a defensive and non-nuclear posture—SDI. Given the relative invulnerability of the Soviet Union, enhanced by an ABM system, the efficacy of which is not known, and given the relative vulnerability of the U.S.A., which possesses no such ABM system, the Soviet Union necessarily saw the SDI project as an additional curtailment of its political options.

In order to regain political mobility, the Soviets had to achieve the following things in negotiations with the U.S.A., corresponding to this evaluation:

- 1) A far-ranging denuclearization of NATO and Warsaw Pact.
- 2) Maintenance of their own ABM system while simultaneously preventing the realization of SDI.
- 3) A mental-political split between the U.S.A. and Europe, including the dissolution of NATO.

At the non-summit conference at Reykjavik, it became clear to the Soviets that they had set their sights too high. The denuclearization package they had conceived fell apart, in spite of conference tactics which surprised the Americans. Thanks to the newly won flexibility of the Soviet leadership, generally attributed to Gorbachov, the Soviets quickly found out how to gift-wrap the Reykjavik package, and offered the Americans negotiations on the nuclear medium-range missiles.

The process and outcome of these negotiations are known. The INF treaty itself is a hotly contested issue.

First, the military argument. It is undoubtedly correct, that were the treaty implemented—if it is ratified despite all

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Under INF, if NATO is attacked, the leadership of NATO and the U.S. President will confront the choice, either to decide to release tactical nuclear weapons, and thus leave Europe to its destruction; or to dare to initiate a nuclear strategic exchange, with the risk of the destruction of the United States itself; or, finally, to capitulate to the Soviets in Europe. Thus, ratification of the INF treaty would grant the Soviet Union a real chance to wage and win a war in Europe—a chance they do not have today.

political doubts and criticism—about 3% of the global nuclear launcher potential would disappear, but only the launchers. For lack of a solution to problems of verification, the warheads themselves are not included in the treaty. The consequences for Europe are far more severe than this 3% might lead one to suspect. While the Soviets are able to replace the SS-20—which would be an obsolete system in three years in any case—with more modern missiles, the SS-24, SS-25, or the SS-27, NATO has no realistic options to compensate for what it loses through the treaty. When I say "realistic" here, I do not mean to say that such options would not be technically available, but rather that for primarily political reasons these options cannot be realized. The years of propaganda which made nuclear weapons appear to be especially satanic weapons has borne its fruit in favor of the Soviet Union. The consequence of that, is that NATO no longer has effective weapon systems at its disposal, which could directly attack Soviet reenforcements in an attack—and NATO can only go into action if it is attacked—and thus prevent the Soviets from supplying and reenforcing their assault forces. This deficiency is further aggravated by the German Federal Chancellor's voluntarily giving up the 96 Pershing Ia. These are, by the way, weapon systems whose nuclear warheads are in the possession, and under the total control, of the U.S.A.

INF would give Europe to the Russians

In the simplest terms, the crucial military consequence of

the INF treaty in Europe will be the relative aggravation of the conventional superiority of the Warsaw Pact over NATO. If NATO is attacked, the cohesion and integrity of the alliance will break apart relatively quickly. At that point, the leadership of NATO and the President of the United States will confront the choice, either to decide to release tactical nuclear weapons, and thus leave Europe to its destruction, or to dare to initiate a nuclear strategic exchange, with the risk of the destruction of the United States itself, or, finally, to capitulate to the Soviets in Europe. Since the last of these alternatives is the most likely, the ratification of the INF treaty by the U.S. Senate signifies nothing else than granting the Soviet Union, at least as far as Europe is concerned, a real chance to wage and win a war in Europe—a chance they do not have today. Or, to express the strategic state of affairs in different terms, this means that the administration of the United States must grant the Soviet Union far-reaching options of exerting political domination over the still free part of Europe, in order to avoid having to make the decision to capitulate directly.

The form and manner in which the Soviet foreign minister stated his demands during his visits recently to Bonn, Paris, and Madrid, are just a taste of what is breaking out all over Europe right now. The Soviet Union, strengthened by the technological and economic capacities of Western Europe, will then become a complete, and thus dominant, world power.

Let me note here, that the Western demands brought forward for additional disarmament negotiations are, from a strategic as well as from the political point of view, merely demands, which the Soviet Union—once the INF treaty has gone into effect—can accept or refuse. It is completely predictable that the Soviet Union will only agree to whatever is to its own advantage. Another consequence of a ratification of the INF treaty should also be kept in mind. The politicalstrategic significance of stationing the United States' own Pershing II missiles and the Cruise Missiles was to strengthen the links between the individual elements of the escalation ladder of "Flexible Response," and thus strengthen the credibility of the strategy on the whole. If these missiles are withdrawn, Europeans' confidence in the firm resolve of the Americans to defend their own freedom in Europe will be severely weakened. In Europe nowadays, a great deal of attention is paid to statements by one or another American politician calling for thinning out the U.S. troop presence in Europe—for reasons which may be superficially plausible or when U.S. officials start talking about changing the status of Berlin.

The assurances that these things are all intended to serve the preservation of peace and freedom in Europe, or contribute to improving human relations in Europe, or relations between the two states in Germany, have already lost what was always a thin mantle of credibility. Outside the ranks of official government representatives in Europe, the ratification of the INF treaty is already understood to be an American signal to the Soviet leadership that America's interest in Europe has diminished. For many Europeans, the INF treaty calls up memories of the political events on the eve of the Korean War.

Once official America looks at Europe as an alliance territory with lower security requirements relative to those applying to CONUS (Continental United States), this will be the beginning of the European dissolution of NATO.

Soviet penetration in West

The relative enhancement of the Soviet superiority militarily will have yet another consequence. The Soviet leadership already employs the network of Communist parties in Western countries whenever this appears to be politically opportune. The events around German nuclear power plants and the German steel industry are the most recent examples. We know that the trade-unions, particularly at the level of the factory-councilors, have been infiltrated by communists. This provides the Soviet Union with an infrastructure in peacetime which can be exploited at any time by spetsnaz forces, the Soviet Special Forces trained for just that purpose. This element of Soviet strategy becomes all the stronger, the weaker the confidence of our citizens in NATO, and thus also the weaker their confidence that America will assist us in the defense of our freedom—the threat to our freedom we witness daily in what our fellow Germans suffer under the SED regime in East Germany.

The ratification of the INF treaty by the U.S. Senate is a major step in the direction of giving up the economic and cultural unity of the Western world. The question has to be asked, whether there is still any correspondence between such a policy and the moral principles and ethical foundations of our common Western culture. Hopefully, we will not have to wait for this question to be answered by history.

There is still time to turn back. The United States does have men and women who have the necessary overview, who are ready to draw the necessary cultural, economic, military, and thus political conclusions, and to act accordingly. The most prominent mind among these true American patriots is Lyndon H. LaRouche. He has launched his bid as a conservative Democrat for the Democratic Party's presidential nomination. The obstacles thrown against him personally, and against his candidacy, are a testimony to the fact, that those who fear a strong America, an America capable of truly leading in the Western world, are co-governing now with their long arms even in your beautiful country.

We Europeans, and I as a German, appeal to you: Let the world economy be saved from collapse, let the Soviets be compelled toward a worldwide cooperation which serves all people on this planet, and which secures the dignity, the right to self-determination, and the freedom of all people.

National News

LaRouche addresses Oklahoma state legislature

Democratic presidential candidate Lyndon LaRouche made a surprise appearance before the Oklahoma State Legislature the afternoon of Feb. 9. He spoke for 10 minutes each before separate sessions of the House and Senate.

LaRouche was introduced to the Senate by Senator Stipe, dean of the body, and to the House by Rep. John Monks, head of the Appropriations Committee.

LaRouche said that what happened in mid-October 1987 was the beginning of a financial crash comparable to the 1929-32 period, but this time, it would be worse. Any attempted bailout "would be insane." Tulsa newspapers and television newscasts, in reporting on his remarks, headlined LaRouche's denunciation of the "idiots in Washington" on this issue.

LaRouche called for using the regulatory powers of government to defend the dollar, keep the local banks functioning, defend U.S. bonds, and using tariffs and other regulatory means available to the government to protect the economy. Then, he said, we can move forward toward economic recovery. "What is required to crank up the U.S. economy is \$5 trillion of federal credit at 1-2% interest rates, restricted to capital improvements in infrastructure, particularly those in agriculture and industry, and to help finance U.S. exports."

We are facing a 50% collapse of federal, state, and local tax revenues, said La-Rouche. This could cause a disaster at the state and local level, since state and local governments cannot operate with a deficit. Lendable credit must be used to maintain the tax base.

"State and local government institutions, businesses, and investors must be involved in determining how to channel this credit to vital infrastructural projects, as necessary to maintain the tax base. It is this kind of cooperation between federal, state, and local governments that will get us out of the depression and prevent a full-scale economic collapse." One of the legislators moved that La-Rouche's comments be entered into the permanant record of the state assembly.

Galvin: Arms pacts don't save money

NATO Supreme Commander Gen. John R. Galvin has announced that Americans should not expect agreements on nuclear and conventional arms control to save money, the *New York Times* reported.

Saying that some people see such agreements "as something that is going to take from their shoulders this necessity for bearing the burden of security," Galvin asserted, "I would caution them and everybody else that . . . that's not a reasonable position and it could be very dangerous."

Galvin, who spoke at the Pentagon, said that the price of agreements on arms control should be modernization of both nuclear and conventional forces, including continued production of MX missiles, the Stealth bomber, and a number of other programs.

"If we think we can flatten out things right now and be assured of pretty good security," Galvin said, "I think we are dead wrong."

He added that a new military strategy would have to be devised if Congress did not appropriate funds for modernization. "We will have to adjust the strategy to the realities of this world," he observed.

Asked whether that would mean cutting the 350,000 troops in Europe or reducing U.S. commitments elsewhere, Galvin said, "I don't know whether I really want to speculate on that. I think that would be a little dangerous."

SDI test launched after five-day delay

An ambitious, \$250 million test flight of a Strategic Defense Initiative (SDI) system lifted off at 5:07 p.m. EST on the evening of Feb. 8 from Cape Canaveral, Florida.

There had been a five-day delay in the launch. The test was pronounced a success by the SDIO, which said it had accomplished all its goals.

The test rocket was a specially modified Delta-181. It carried a complex 6,000 pound instrument package in its second stage.

The instrument package included multiple sensors and 15 small satellites that were ejected in space. The mission lasted 12 hours and covered eight orbits.

Officials called it the most complex mission ever attempted by the SDI program. Its primary goal was to determine how well the space sensors could distinguish between the small satellites—which were designed to simulate Soviet warheads—and potential decoys.

According to Army Col. Raymond Ross, speaking while the mission was in progress, the payload was to "perform over 200 complex maneuvers while conducting sensing operations... related to the detection and tracking of ballistic missiles. Approximately 100 ground-based radars and aircraft around the world are monitoring the mission."

Another SDI Delta flight is planned for later in the year.

Ross, a top SDI official, said the mission was within the bounds of current treaties with the Soviet Union.

Court says Army can't bar homosexuals

A three-judge panel in California has ruled that the armed forces can no longer ban homosexuals from serving in the U.S. Armed Forces. Incredibly, the court saw fit to compare the Army ban on homosexuals to laws against interracial marriages, and called the ban unconstitutional.

The panel of the 9th U.S. Circuit Court of Appeals in California has ruled that discrimination against homosexuals who wish to serve in the armed forces violates the equal protection clause of the Constitution.

Judge William A. Norris, who wrote the 60-page majority opinion, ordered the Army to consider the application for re-enlistment

of a 14-year Army veteran, Sgt. Perry Watkins, "without regard to his sexual orientation."

"Laws that limit the acceptable focus of one's sexual desires to members of the opposite sex, like laws that limit one's choice of spouse [or sexual partner] to members of the same race, cannot withstand constitutional scrutiny absent a compelling government justification," Norris wrote.

All three judges on the panel, who handed down their decision Feb. 11, were appointees of President Jimmy Carter.

The Army said it will appeal for the decision to be referred to the 9th Circuit's full 11-judge court, and, if necessary will take its appeal all the way to the Supreme Court. The armed forces have traditionally held that the presence of homosexuals in the ranks has a bad effect on the morale of troops.

Army plans germ warfare lab in Utah

The U.S. Army plans to construct a laboratory in Utah to conduct sophisticated experiments with deadly germ warfare agents. The Pentagon made the announcement on Feb. 4, saying that the laboratory would be one of the most secure in the world, and that the program involved was defensive in na-

The Army plans to build the \$5.4 million facility at Dugway Proving Ground in the Utah desert. It will be used to test equipment being developed for defense against enemy biological warfare attack.

Among the organisms to be studies are those capable of causing anthrax, Q fever, tularemia, and encephalitis.

Air Force cancels ASAT program

The U.S. Air Force, without formal announcement, has canceled the U.S. anti-satellite (ASAT) program due to what Defense Secretary Frank Carlucci has called "fiscal

realities," i.e., budget cuts, coupled with congressional opposition to effective testing of ASAT systems.

The Soviet Union currently has two operational ASAT systems.

Carlucci made the decision known in a letter to Sen. Jesse Helms. "I take this action reluctantly," Carlucci wrote. "I continue to believe that the United States needs an operative ASAT to deter the Soviet Union from exploiting its present ASAT monopoly and space-based targeting capabilities . . . [but] the inability to test effectively prohibits us from pursuing a meaningful operational ASAT ALMV program."

Carlucci wrote the letter in response to a request from Helms for a new fighter squadron for the North Carolina National Guard. Carlucci said that "fiscal realities" prevent its formation at this time.

"As I expect you are aware, the amended FY89 budget request will be reducing the active Air Force by two tactical fighter wings, and reserve units by an equivalent of another wing," the secretary said.

Congress super liberal, says ADA

The Americans for Democratic Action (ADA), an ultra-liberal lobbying organization, found the U.S. Congress to be far more liberal in 1987 than in any other recent year.

The ADA annually rates all senators and congressmen according to their voting record on a range of issues.

After rating for the past year was completed, ADA executive director Marc Pearl told the Washington press corps, "The pendulum has surely swung back our way." Both Houses of Congress, he said, posted rating averages of greater than 50% for 1987.

During the past 12 years, the highest either House had registered was 49%. Never have both Houses of Congress reached even that level in the same year.

The ADA found that each chamber had more members scoring an ADA 100% rating than in any of the last dozen years.

The ADA, said Pearl, considers anyone with a 70% rating or better to be "a liberal."

Briefly

- MAYOR ED KOCH of New York was in Rio de Janeiro, Brazil through Feb. 18 for the Carnival festivities, Brazil's equivalent of Mardi Gras. He spent Carnival in the box of Rio prefect Saturnino Braga. Among the sites he visited was the Benedictine monastery of São Bento.
- THE COAST GUARD has announced that its expenditures for drug enforcement patrols for the balance of 1988 will be slashed by 55%. In addition, 11 of its 157 search and rescue stations will be closed by March 1, and 14 of its 61 marine safety units will be closed by March 31.
- SEN. ALAN CRANSTON estimates that there is a "50-50 chance" that the Democratic nominating convention will be "brokered." Cranston made his remarks on John Mc-Laughlin's "One on One" television show on Feb. 7.
- JAMES BEGGS, the former NASA administrator who was forced from his post by a spurious Justice Department investigation, has been named chairman of Spacehab, Inc., a Washington-based corporation that plans to develop laboratory modules for manufacturing and research aboard the Space Shuttle. Spacehab's modules will be used to process semiconductor crystals, polymers, protein and optical crystals, thin films, and other materials, using the advantages of the low gravity in space.
- THE JUSTICE Department's Office of Special Investigations is stepping up its "investigation" of Austrian President Kurt Waldheim, even though an international historians' commission has found him innocent of war crimes charges. An OSI official has been sent to Yugoslavia to scour archives in search of Waldheim's name. An OSI official said it is "possible" that Waldheim's name will turn up. OSI does this sort of thing, when the Kremlin demands it.

Editorial

The need for new leadership

Between the Iowa caucuses of Feb. 8 and the New Hampshire primary of Feb. 16, which bracket the first phase of the U.S. 1988 presidential election campaign, Lyndon LaRouche sized up the stable of Democratic and Republican candidates seeking the highest office in the land, before audiences in Texas and Oklahoma. As a Democratic presidential hopeful, LaRouche said that he would not mind having a couple of his "rivals" as neighbors. As *President*, not one is qualified.

Gov. Michael Dukakis is a front man for a crowd of crooks who stole \$2 billion from the state of Massachusetts over the past 10 years—not the kind of persistence we need in Washington. Gary Hart, while not unintellectual, is wrong in his philosophical and moral views. Paul Simon is nasty, and not qualified to be President.

Pat Robertson is a symbol, not a reality. A lot of the vote for him is useless and volatile, because it is a protest vote against things that people don't like—such as most of the other candidates.

Bush is a "CIA locker-room knuckle-dragger," who wants "root canal economics," just like Robert Dole. Most of the candidates want hardball austerity, and they will repeat the same mistakes of 1929-32, which will bring us to a full-scale economic collapse.

If the present trends in policy continue, the United States is probably finished. The Soviets are about to dominate the world by default. There is a pattern of people who want to be President of the United States: They go to be approved by Moscow.

Bush tells you how well he'll get along with Moscow; that's his qualification for being President. The United States lets its friends starve while we give grain away, practically, to Moscow. In that kind of world, we sell to Moscow what it wants, when it wants it delivered, at Moscow's prices. They pay us when they please, and we give them the credit to pay us.

There is a conspicuous ludicrousness in the fact that such a degree of Soviet threat has come into being. Still today, the OECD nations represent twice the population of the Soviet empire, and their citizens have a demonstrated potential to be at least twice as physically productive per capita as Soviet subjects, with a greater capacity to assimilate rapid rates of technological progress. We still represent, in addition to OECD nations, almost the totality of the non-communist developing sector, with its population, natural resources, land-area, and implicit bearing on control of maritime chokepoints. To have come so low relative to the Soviet threat, is ludicrous.

The fault lies not in our circumstances, or want of means to improve those circumstances. The fault lies chiefly in the way in which our governments decide, or refuse to decide. To a certain degree, the fault lies also in our toleration for the selection of governments whose incompetencies had been repeatedly so generously displayed.

The strategic and related financial and economic crises confronting us are the most important aspect of a more general crisis of civilization. The Soviet threat, on which point we are nearing the last desperate approximation of a *punctum saliens*, is one immediate implication of this. The AIDS pandemic is another. Here, the establishment is playing silly games with the very existence of the human species.

The question of survival is: Will we project into positions of readiness to assume leadership new leaders prepared to supply the needed changes in direction? Without that, we shall not survive for long—at least not survive in any way we would consider satisfactory.

Beyond that, and as part of that, the new policies to be introduced must address themselves efficiently to the need for sanity, both in the population generally and in the public and private institutions of policy-shaping practice and influence. We must define a mission-orientation congruent with fostering of the development and employment of creative potentials, a result to be achieved with aid of strong emphasis upon scientific and technological progress in a capital-intensive, energy-intensive mode.

These are the real issues in the 1988 presidential campaign, as we move past New Hampshire.



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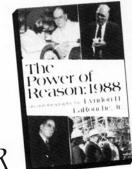
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