

# EIROperation Juárez

## A new canal between the Atlantic and Pacific

### Part 18 Ibero-American integration

Infrastructure is not an industry that produces wealth directly, but it "produces" something more important: productivity. To become an economic superpower, Ibero-America will need 200,000 kilometers of new railroads, as well as ports, canals, hydraulic projects, nuclear energy, and a second inter-oceanic canal.

This installment continues Chapter 6 of our exclusive English-language serialization of the Schiller Institute's book, *Ibero-American Integration: 100 Million New Jobs by the Year 2000!* The book was published last September in Spanish. It was prepared by an international team of experts elaborating Lyndon LaRouche's proposal to free the continent of economic dependency and spark a worldwide economic recovery, "Operation Juárez."

Numbering of the figures, tables, and maps follows that of the book.



### The inter-oceanic sea-level canal

As much as the Panama Canal was a wonder of technology in the early 20th century when it was constructed, today it is woefully inadequate even to the depressed flow of international trade today, and transportation through it is suffering serious stagnation (see **Figure 6-2**). The Ibero-American trade flows that will be unleashed by the Common Market will make the current canal totally obsolete.

The options proposed to remedy this include widening the existing canal, digging another lock canal, digging a new canal at sea level or substituting rail links across the isthmus for new canal capacity. However, almost none of the ongoing discussions foresees significant increases in intra-continental trade, whereas, according to the program presented in this report, that trade can be expected to grow extremely rapidly, to 10 or 20 times its present size in the decades ahead.

Moreover, the primary cargo traversing the canal at present is bulk commodities, and the existing projections assume a continuation of that composition. However, under the assumptions of the program in this report, the canal will become the artery connecting the east and west coasts of Mexico, Central America, and South America for all types of cargo, primarily manufactured goods. Given that transport across the Andes will remain a limited and costly enterprise for several decades at least, the canal will be vital to the integration of the continent by trade between the Atlantic and Pacific coasts. In any case, under an assumption of 5% growth in the world economy, the non-Ibero-American trade through the canal can be expected to grow substantially by the year 2000, as shown in **Table 6-5**. The combined volume of cargo need-



Scale model of the Atrato-Truandó Canal presented at Colombia's Agroexpo Fair in June 1985. Explaining the project is Elizabeth de Almarío of the Fusion Energy Foundation.

ing to use the canal makes absolutely essential the construction of a two-lane sea-level canal. Nothing less will be able to handle the traffic.

Map 6-5 shows the two optimal sites for sea-level canals, one in Panama not far from the existing canal (Route 10), and one through northwestern Colombia utilizing the riverbeds of the Atrato and Truandó rivers for most of their length (Route 25). Which of the two sites should be chosen is an open question. We can only say that both are eminently feasible, and we present the basic parameters of constructing each of them below.

### A second Panama Canal

The best design for a new Panama Canal calls for a two-lane canal through which two ships of 300,000 tons of dead weight (dwt) each could pass simultaneously. The canal dimensions would be 450 meters across at the bottom, at a depth of 29 meters. The length would be 82 kilometers, duration of crossing 5-8 hours, and 280,000 crossings a year would be possible, almost 20 times the present number. Construction is estimated to take 12-14 years, using conventional methods, and cost \$15-\$18 billion. At the peak of construction, at least 10,000 workers would be directly involved. Additionally, industrial complexes and major ports would be constructed at each terminus of the canal. These complexes would specialize in heavy industry, importing a portion of the bulk commodities that would pass through the canal for processing into semi-finished or finished products, such as refining metallic ores such as iron and aluminum, or fabricating heavy machinery from imported steel.

The economic impact on Panama alone would transform that country into a semi-industrialized country with just this

project, and for the region the economic impact would be incalculable.

### The Atrato-Truandó Canal in Colombia

According to this design, the canal would begin in the Gulf of Urabá, on the Atlantic side, and terminate in the Humboldt Bay on the Pacific, traversing the Atrato and Truandó rivers for most of their length. It would have the

FIGURE 6-2  
Cargo transported through Panama Canal  
1950-1984

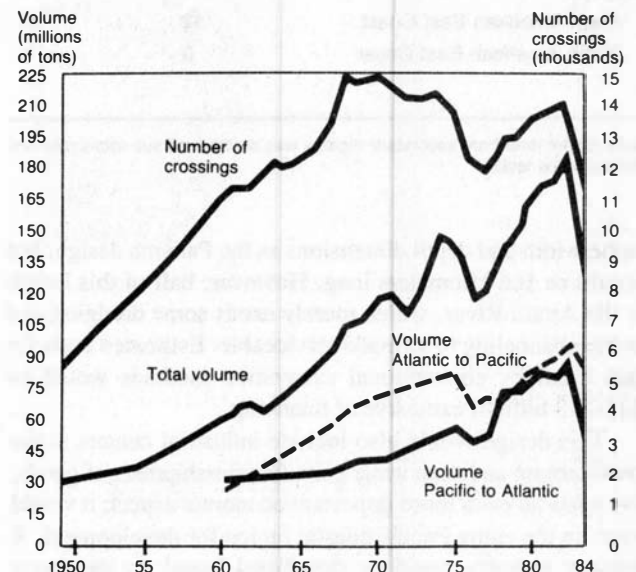


TABLE 6-5

### Projection of Panama canal cargo transport 1983-2000

(millions of tons)

	1983	2000
<b>Atlantic to Pacific</b>	<b>88</b>	<b>300</b>
North American East Coast to:		
Asia	57	120
Grains	29	41
Coal	9	30
Other	19	48
North American West Coast	5	14
South American West Coast	5	17
South American East Coast to:		
Asia	2	75
Iron ore	0	60
Coal	0	10
North American West Coast	2	10
South American West Coast	2	10
Europe to:		
North American West Coast	3	6
South American West coast	1	4
Africa to Pacific Coast	0	10
<b>Pacific to Atlantic</b>	<b>58</b>	<b>150</b>
North American West Coast to:		
North American East Coast	9	35
Oil	6	30
South American East Coast	1	3
Europe	10	17
Africa	2	7
South American West Coast to:		
North American East Coast	8	13
South American East Coast	0	5
Asia to:		
North American East Coast	12	23
South American East Coast	0	5

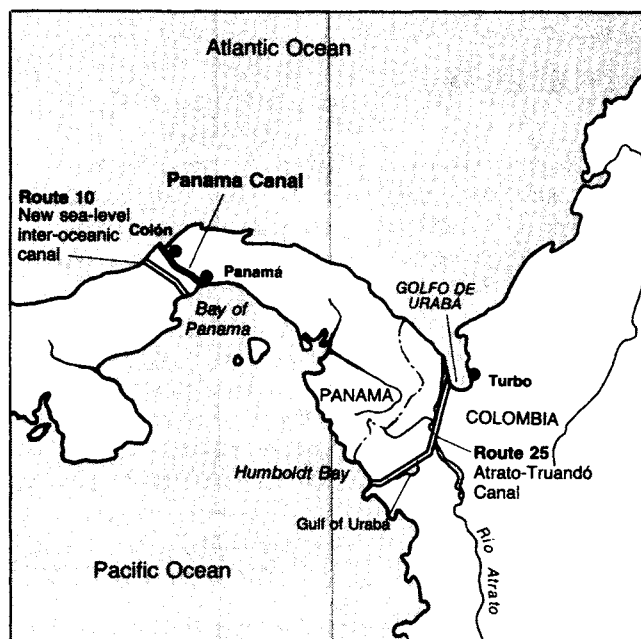
Note: Some data from secondary regions was omitted, so sub-totals may not always equal totals.

same width and depth dimensions as the Panama design, but would be 166 kilometers long. However, half of this length is the Atrato River, which merely needs some dredging and water channeling to be made serviceable. Estimated costs for this canal by conventional excavation methods would be \$11-\$13 billion, exclusive of financing.

This design would also include industrial centers at the canal termini and deep water ports for transshipment of goods, but it has an even more important economic aspect; it would open up the entire Pacific coastal region for development. A forestry industry could be developed based on the forest

MAP 6-5

### Two possible routes for a new inter-oceanic canal



resources along the canal and rivers that will feed into the canal, not to mention the abundance of coal and other mineral deposits there.

### Peaceful nuclear explosions (PNEs)

The costs given above assume conventional construction methods. However, there is no reason such high costs and long construction times should be accepted, because the use of peaceful nuclear explosions, which are an already developed and tested technology, would significantly reduce the one and shorten the other. The difficulty lies only with the irrational campaign that has been launched against nuclear energy and nuclear construction methods by the environmentalist lobby worldwide.

The fact is that a program of peaceful nuclear explosions had been developed under the title Plowshare by the United States Atomic Energy Commission by the late 1950s, and fully tested. Since then, further improvements have been made. When feasibility studies were completed in the early 1970s for the Kra Canal in Thailand, alternate calculations were made based on use of PNEs, and such calculations were also made for several of the optimal routes for a new inter-oceanic canal in U.S. Army and other studies of the same period. It has only been in the 1970s and 1980s that the anti-nuclear campaign has led to shelving plans to employ PNEs.

PNEs involve placing small nuclear charges instead of conventional dynamite or chemical explosives. The charge is not only much more powerful and throws up a great deal more earth. It has also been demonstrated that the charges

## Kra Canal: on Thailand's horizon

While projects for a new inter-oceanic canal in Panama or Colombia are still only in the proposal stage, at the other side of the Pacific the "Kra Canal," promoted since the early 1980s by *EIR* and the Fusion Energy Foundation, is being moved toward realization.

On Jan. 15, a special committee of the Thailand parliament will visit the proposed site for the construction of a canal through the Isthmus of Kra in southern Thailand. The proposal now on the agenda in Thailand is for a two-lane canal, adequate for supertanker passage, which would join the Andaman Sea in the west with the Gulf of Thailand. The canal would shorten the route between the Indian and Pacific Oceans. By the end of January, the parliamentary committee is expected to pass a mandate for a government-commissioned full feasibility on the proposal.

Immediately, the Kra Canal would alleviate the dangerously increasing traffic through the narrow straits between Singapore and Indonesia, with a shorter route across the Thai isthmus. Also proposed is a superport to be constructed at the current city of Songkla at the eastern end of the canal, which would service all of Southeast Asia. An

industrial zone would also be built up along the canal sides, marking a total shift in Thailand's economy toward full industrialization.

The parliamentary committee has heard testimony from Uwe Henke v. Parpart, director of research for the U.S.-based Fusion Energy Foundation, from Mr. K. Y. Chao, who financed a feasibility study for the canal in 1973, and Gen. Saiyud Kerdpol (ret.) of Thailand, who has argued that the canal is vital for Thailand's national prosperity and hence, vital to its national security.

In 1973, the canal was on both Thailand and Japan's agenda, as critical for world trade flows from the Mideast to Japan and the western United States. But with the 1973 oil hoax, the idea was put back on the shelf. In 1983, the Fusion Energy Foundation began a campaign for the canal in Thailand as one of the key projects specified in both Lyndon LaRouche's economic development plan for the Pacific Basin, and by the Global Infrastructure Fund of Japan.

The enemies of the canal are, not surprisingly, those who take their orders from the technocrats of the World Bank and the International Monetary Fund. Henry Kissinger also has voiced his desire to return the "canal to the graveyard forever."

But in the past two years, the Thai economy has been hit hard by IMF-enforced austerity and currency devaluations. Thai leaders in government, military, and business, are now looking to the canal as the only alternative to the total destruction of the Thai economy.

can be placed so as to practically dig the channel in the desired shape, leaving very little subsequent earth-moving to be done.

The charge that PNEs will release dangerous radiation is a hoax. The explosions create little or no radiation in the first place, so little that it would be dissipated before having any effect on the environment. But, if properly engineered, the explosions themselves create sealed compartments that prevent the little radiation that might be there from leaking into the environment.

Finally, although the technology is largely monopolized by the United States and the Soviet Union, the United States is under obligation, by the explicit terms of the Nuclear Non-Proliferation Treaty, to share the PNE technology with any nation that requests it. No nation has to date made such a request, but it is high time they did.

In terms of the great projects discussed in this chapter, PNEs could make a very great contribution especially to the trans-Andean water projects and in road and railroad construction, where the use of PNEs could easily reduce construction times up to 75% or more, cut costs in half or less, and make feasible projects that otherwise couldn't be done at all.

### Air transport

Finally, an expanded program of air transport, for both passenger and freight, needs to be implemented. Ibero-America's accidental geography, including the Andes, means that air transport will always be needed for moving high-value items. To satisfy the needs of the next century, trans-continental passenger traffic will increase dramatically, primarily for business purposes. To satisfy these needs, all of the major cities of Ibero-America will have to either greatly expand their existing airports, where that is physically feasible, or construct entirely new airports. Moreover, smaller airports need to be constructed linking hundreds of smaller cities.

For the short term, most airports today have ample unused capacity, which means that simple scheduling of more flights at off-hours can meet the new requirements. There is also excess freight capacity, as most passenger airline flights have room for considerable air freight in their holds that is not now being utilized. However, in the future, the continent will need to develop specialized fleets of cargo planes that can efficiently transport high-value cargos such as capital goods.

*Next week: Water resources management projects.*