

MISSION TO BRAZIL

A Report by  
Sidney Sherwood

With the Collaboration  
of  
Walter C. Sauer  
and  
Robert F. W. Whitcomb

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## MISSION TO BRAZIL

### Chapter I

The party composed of Mr. Martin, Mr. Seuer, Mr. Whitcomb, and Mr. Sherwood took off from LaGuardia Field in a Pan American DC-4 at 7:40 AM, October 7, 1946, stopping at San Juan, Port-of-Spain, Trinidad, and arriving at Belem, Brazil at the mouth of the Amazon at 7:30 AM, October 8th, where a reception committee was waiting composed of the Postmaster and other officials. They met the party on instructions from Colonel Macedo Soares, Minister of Transportation. None of them could speak English and Mr. Whitcomb relieved the situation by acting as interpreter. The party left Belem at 9:00 AM, flying across the jungles of Brazil and arriving at Rio four hours late at 5:30 PM, October 8th. Our delay in arrival was due in part to heavy storms over the mountains out of Rio.

We were met at Galihao airfield by Colonel Oliveira, President of the Companhia Siderurgica Nacional, Mr. West, Export-Import Bank Representative in Brazil, and several other representatives of the steel company and of the Government. We were transported by motor launch to the mainland where Colonel Macedo Soares, Minister of Transportation, Members of the American Chamber of Commerce, representatives of the press, Mr. Beattie, Representative of the National City Bank of Rio, and Admiral Powell of Pan American greeted us. From there our party went directly to the Gloria Hotel. After our strenuous trip we avoided all engagements for the evening.

Arrangements had been made for the party to leave by plane at 7:00 AM the following morning, October 9th, for Vitoria to visit the

Itabira Mine. We decided that it would be better to call first at the American Embassy and have a few conversations in Rio before taking this trip. Accordingly, it was postponed until the following Monday, October 14th.

On the morning of October 9th the party had a conference at the hotel with Mr. West for the primary purpose of planning the schedule for our stay in Brazil. Mr. West brought the party up to date on the general political situation, indicating that the Cabinet was in the process of being changed and reported on the status of his most recent conversations with Colonel Soares. This situation faced us with the predicament as to who should be talked to about what and confirmed the wisdom of our having decided to spend a few days in Rio as it gave us an opportunity to talk to officials of the Government who were about to go out while they were still in office.

At 10:30 AM the party called on Paul Daniels, Chargé d'Affaires at the American Embassy as Ambassador Pawley was in the States. In addition to our party, Mr. Daniels, Mr. Brooks, Economic Adviser, and Mr. Clark in charge of Financial Affairs at the Embassy, were present. We informed Mr. Daniels of the purpose of our visit which was to attend the dedication of the steel mill at Volta Redonda, and to obtain as much information as possible about the projects in Brazil in which the Bank is interested and the general economic situation in Brazil. We explored the existing Brazilian credits, including the Rio Doce, Volta Redonda and the Sorocabana Railway. We also brought Mr. Daniels up to date on the status of the pending \$50 million credit. Mr. Daniels suggested and arranged for the party to meet with the Business Advisory Group of the American Embassy

composed of American business men operating in Rio. Mr. Daniels designated this group in the fall of 1945 and reports that he has found it most useful. At Mr. Daniels' suggestion, Mr. West arranged for the party to attend the luncheon of the American Chamber of Commerce on Thursday, October 10th in Rio where they might hear from Mr. Martin.

At 11:30 the party called on Col. Macedo Soares. This was primarily a courtesy call to thank him for his having received us on our arrival and to inform him of our schedule. He arranged for us to spend Friday, the 11th, inspecting the airplane engine factory and seeing the town of Petropolis.

At 12:30 we attended a luncheon arranged by Mr. West with Mr. Boucas. Mr. Boucas was Brazil's representative at Bretton Woods and is now the International Business Machine representative in Rio. During the luncheon an informal discussion took place concerning the Brazilian situation. Mr. Boucas expressed apprehension concerning the International Bank. He stated that many Brazilians viewed the International Bank as a "British instrument designed to siphon American financial resources into the British sphere of influence in Europe." Mr. Martin explained at some length the relationship between the International Bank and the Export-Import Bank, pointing out the fact that the International Bank's assuming the major responsibility for long range reconstruction and development loans did not indicate a lessening of American interest in Brazil. Mr. Boucas also stated that Brazil was generally disappointed in the results of Col. Soares' mission to the United States; it being the opinion that the \$50,000,000 credit was not as much as had been hoped for.

In the afternoon, Mr. Martin and Mr. Sauer had a talk with Dr. Guinle, a Brazilian of some consequence in financial circles, while

Whitcomb and Sherwood got their second typhoid shots. Dr. Guinle expressed similar sentiments to those of Mr. Boucas. He said there was disappointment in the results of the Soares mission. He urged that the Bank have no fear of lending to Brazil; that its future was great. He urged the party to visit Sao Paulo and Santos where he said the real strength of Brazil lies. He expressed apprehension and gloom on the international situation but emphasized his confidence in Brazil's future. That night the party dined at the Copocabana Palace with Mr. West.

On Thursday, October 10th, Mr. Martin with Mr. Sherwood present, interviewed Mr. Roberto Lyra Filho of "Diretrizes Democracia" and Mr. Mendez of "O Journal". Mr. Sauer and Mr. Whitcomb went to the American Embassy for a preliminary talk with Mr. Brooks, the Economic Adviser, prior to our meeting with the Advisory Group. At 11:00 A.M. Martin and Sherwood proceeded to the Embassy to attend the meeting called by Daniels of the American Advisory Committee composed of the following individuals:

Mr. George W. Hufsmith - Chairman  
Rio de Janeiro Tramway, Light & Power Co. Ltd.  
Mr. Wingate M. Anderson  
Standard Oil Company of Brazil  
Mr. Harry F. Covington  
Companhia Expresso Federal  
Mr. Ralph H. Greenwood  
General Electric, S/A.  
Mr. James E. Marshall  
Lojas Americanas, S/A.  
Mr. Kent Lutey  
Cia. U. S. Harkson do Brasil  
Mr. Ralph Metley  
Atlantic Refining Company of Brazil

Messrs. West, Whitcomb, Sauer, and Brooks and Clark of the American Embassy were present. Mr. Martin explained the purpose of the Mission pointing out that in addition to the dedication of the steel mill, we were taking advantage of the opportunity to get first-hand information.

He explained the relationship between the International Bank and the Export-Import Bank pointing out the general division of functions between the two institutions. There was a discussion of the Brazilian foreign exchange situation. Mr. Clark made the following statement as to the Embassy's estimate of Brazil's foreign exchange assets:

"Recent figures indicate that whereas Brazil enjoyed a favorable balance of trade amounting to over three billion cruzeiros in the first seven months of the current year, its balance with the North and Central America was unfavorable to the amount of 280 million cruzeiros. As a consequence of this, it is not impossible that Brazil may at the present time be on the threshold of a period of accumulation of reserves in currencies which will be available only for purchases in certain areas and may at the same time be commencing the depletion of its dollar resources. On the basis of the Bank of Brazil's balance sheet as at August 31, 1946, the net credit balance with foreign correspondents amounts to approximately 400 million dollars after deducting 28 million in connection with Equipment Certificates which are convertible into foreign currency and 126 million representing promissory notes in foreign currency backed by the Bank of Brazil on behalf of several government agencies, there remains a long foreign exchange balance amounting to 246 million dollars. The most recent estimate of sterling balances is in the neighborhood of 50 million pounds (Macedo Soares estimated this at 225 million dollars) so that it can readily be seen that there are low dollar availabilities at the present time and, therefore, the trend in Brazilian-United States trade may well cause Brazil to dip into its gold reserve which as of August 31 amounted to approximately 380 million U. S. dollars."

Mr. Greenwood commented on the shaky political and economic situation in Brazil, emphasizing the bad inflationary condition. He pointed out that too much money is being put into real estate and building rather than productive enterprise. Much money has been put into building of modern apartment houses in Rio. Many of these are cooperative apartments - that is, the individual apartments are sold frequently before ground is broken for the building. Several sales transpire before the buildings are completed, each involving a profit. The final owner of the apartments finds himself in a position of having to charge a rent which is prohibitive. Consequently, many of

the new apartments are half empty although Rio is suffering an acute housing shortage. Mr. Sauer and Mr. Sherwood inquired as to whether any members of the Advisory Group had ideas relative to potential imports into the United States from Brazil. None were forthcoming.

At 12:15 the party went to the Auto Club where the American Chamber of Commerce was holding its luncheon. There were about 100 members present which was an unusually large turnout for Rio. There are about 500 members in the American Chamber of Commerce there. In addition to the members of our entire party, Col. Macedo Soares was there. Mr. Martin addressed the group extemporaneously, explaining the purpose of our mission and again explaining the relationship of the Export-Import Bank and the International Bank, placing emphasis on the fact that if our objective of one world is to be realized, such institutions as the International Bank must receive the wholehearted support of its member states. He likewise stressed the great American interest in Brazil and its future and told his audience that they, as American business men in Rio, were truly ambassadors of the United States. Accordingly, he would welcome any suggestions which they had looking toward promotion and facilitation of two-way trade between the United States and Brazil. It was evident that all of those present exhibited unusual interest in Mr. Martin's remarks and were most appreciative that he had found time to come to the luncheon. Several of them told us afterwards that it was the first time they had got a clear conception of the respective roles of the International Bank and the Export-Import Bank.

That afternoon Mr. Martin called alone on the British Ambassador

and had an informal talk lasting an hour. They discussed Brazil in general and Rio Doce in particular. The Ambassador expressed doubt as to whether the Rio Doce project would ever work due to the difficulties of providing and operating an adequate railroad through the difficult terrain of the Vale do Rio Doce for the transportation of the Itabira ore in sufficient quantity. He indicated that the British had lost all interest in the enterprise, explaining that the earlier British interest arose from the fear during the war that their supply of iron ore from Sweden would be cut off. From the Ambassador's remarks, it appeared that the British were really out and intended to stay out of the Rio Doce project.

On October 11th, the party left Rio by motor cars supplied by Col. Soares. We were accompanied by English-speaking Brazilian engineers, a Mr. Menendez of the Obras Sanitarias administration, and a Mr. Gianinni of the Fabrica Nacional de Motores. The cars, being official cars of the Ministry of Transport, had the right-of-way. Brazilian drivers, even without the right-of-way seem to get an exhilaration from a speeding motor which causes them to accelerate at least 50% when a curve comes in sight, taking it on the inside with horns wide open. Our nerves had reached the breaking point when we saw the needle on the speedometer touch 95 and were only slightly relieved when our engineer companion explained it indicated kilometers equivalent to about 65 miles per hour. Our first stop was at the Baixada Fluminense. This is a fascinating drainage project around Rio. The brackish marshes were great breeders of mosquitos. Dams have been installed and a series of pumping stations transfers the water into channels running into the sea leaving large areas of flat arable land irrigated by channels of fresh water. The

purpose was twofold: it has eliminated the malarial mosquito from this area and has made available for cultivation some 6,000 square kilometers. It required miles of drainage canals, many of which were dug by hand labor and mule carts, although drag lines have been used more recently. The project has reached near completion and has been accomplished in an amazingly short period of years, having been started in the middle 30's. Modern pumping equipment has been installed and the pumping stations are really impressive. The Brazilian engineers in charge seemed intelligent and very proud of their work.

We proceeded to the airplane engine factory where Brigadier Muniz is in charge. He is a highly intelligent and enthusiastic Brazilian engineer. He has conceived a plan which calls for admiration. The factory appears neat and well tooled, company houses with adequate sanitation have been planned, and likewise a water treatment plant which is rare in Brazil, and a large company farm is in operation supplying the necessary vegetables and milk. The staff house on a high knoll is a particularly artistic undertaking -- white stucco with beautiful landscaping complete with swimming pool. On a corresponding knoll are the houses for the staff with families. They are attractive and of individual design.

Although the Brazilian imagination in these new projects is attractive, one cannot help but wonder if there is not a tendency to place too early emphasis on the desirable but not essential aspects of a new project. One wonders if the attractive staff houses, etc., should not come later and out of the profitable operation of the factory. This does not mean that the airplane engine factory has been neglected. The main effort in the factory

is now being devoted to airplane engine overhaul. There is no doubt that there will be a continuing need for airplane engine repairs in Brazil. However, Panair do Brazil and Cruzeiro do Sul do their own engine repair. The factory had just completed its first airplane engine repair job. In addition, it has an aluminum foundry and is making a variety of items including aluminum frames for railway car windows, compressors for refrigeration units, aluminum spindles for textile factories and large quantities of pins for hand grenades for the Brazilian Army. Brigadier Muniz stated that they are exploring the possibility of converting part of the factory to mass production of tractors. When questioned as to whether he would need such high precision tools for the making of tractors, he stated that he could use all of the machine tools which he had for their manufacture.

This factory was built during the war with Lend-Lease funds. Col. John Ferris from the United States Army Air Forces is residing there with his family and is in charge of the airplane engine overhaul. He appears to be a very capable and intelligent young man who is most enthusiastic about the possibilities and the future of this factory. Whether or not its operation will be successful will be determined by its ability to produce tractors or other items at a price lower than prices of similar items imported from the United States.

Col. Soares joined us for lunch at the staff house. We had the usual six course luncheon accompanied by appropriate wines, etc., which made the party feel more like spending the afternoon in the landscaped garden than proceeding. However, we pushed on to Petropolis over a well-constructed three-lane paved highway through the mountains. The heavy

fog shut off the view unfortunately. We were conducted by the Curator through the National Museum which was the summer palace of the last Emperor, Dom Pedro Segundo. The Brazilians are very proud of their last emperor and the history of their country during his benevolent reign. We drove through the streets of the quaint and attractive town of Petropolis through the main street of which flows a small river. The party stopped at the Hotel Quitandinha which is a fantastic creation passing all imagination. It is a great white structure beautifully done with a modern interior and a casino which probably rivals Monte Carlo. All casinos in Brazil have been closed in recent months, and the hotel was in the doldrums. Where it formerly had 500 guests there were 70 when we were there. Why so much Brazilian money was poured into so unproductive an enterprise when the whole country is in need of highways and railroads to make its resources available constitutes the big question mark concerning Brazil. It occurred to us it might be a perfect spot for the United Nations with no Westchester residents to argue with.

The following day, October 12th, the party left on a special train for the dedication of the steel mill at Volta Redonda. President Dutra and his Cabinet boarded the train. Mr. Martin rode in the President's car and talked with him informally. Mr. Feio, General Manager of the Central Railroad, an apparently intelligent and responsible person, was most attentive to our party.

In his conversations with President Dutra which had to be conducted through one of the Cabinet officers, Mr. Martin expressed the great interest of the Export-Import Bank in completion of development of the

Vale do Rio Doce. Each time Mr. Martin expressed this, the President smiled, nodded and indicated that he understood. The steel mill at Volta Redonda is a bold and magnificent undertaking, appears to be well constructed and to the uninitiated it would seem to compare favorably to steel mills in the United States. Once again, its success depends on proper management and a solution of the coal problem. At present, the mill is using 80% native Brazilian coal, brought with difficulty from Santa Catarina far to the south, mixed with 20% imported coal. Col. Soares stated that they planned to increase the imported coal content in order to improve their coke. Several American technicians are in the management. Mr. Korb, a former employee of American steel companies, is superintendent of operations. He is a genial hard-hitting type and seems confident that the operation will prove successful. Col. Soares stated that the site at Volta Redonda had been selected only after careful study. The decision was based on the presence of limestone, water and the feasibility of obtaining the ore from the mines some 300 miles distant.

In addition to the factory buildings, Volta Redonda as a town is a complete and selfsufficient unit. It has its own farm supplying meat and vegetables, probably the only satisfactory water treatment plant in Brazil which makes possible drinking of water from the tap, hundreds of company houses for staff and workers with individuality of design not found in the usual company housing project in the United States.

Following the ceremony, lunch was served. Mr. Martin was seated next to President Dutra. In the speeches of Col. Oliveira and Col.

Soares, emphatic mention was made of the part the Export-Import Bank had played in financing the purchase of equipment and technical services. It proved the wisdom of the Export-Import Bank having a delegation there on that occasion as the Brazilians could well have ignored the American participation in the enterprise and played it up as solely a Brazilian accomplishment.

The following day, the 13th, being Sunday, the party relaxed, spending most of that day sunning themselves on the Copocabana Beach and at the races.

## Chapter II

On Monday, October 14th, the party accompanied by Mr. West, Dr. Pimenta, President of the Rio Doce, Mr. Kennedy of Morrison-Knudsen, and Mr. Murphy, assistant to Mr. West, left Rio in a Lodestar plane furnished us by President Dutra. We flew to Vitoria arriving there at 9:15 AM -  $1\frac{1}{2}$  hours which on the railroad would have taken 22 hours. We had an excellent view from the air of the picturesque town of Vitoria and later drove through the town being taken on a special train over the track which encircles the hill leading to the ore bunkers. We inspected the bunkers which at the time contained some 40,000 tons of iron ore from the Itabira mine. The total capacity of the bunkers would approximate 75,000 tons. No ships were being loaded while we were there. One difficulty with the operation of the bunkers is the fact that the gears for opening and closing the gates when loading vessels are too high a ratio to move the gates when the full

weight of the ore is against them. New gears are being placed on three or four of the gates and plans have been made for changing all the gears to facilitate loading. We were served lunch at the headquarters of Morrison-Knudsen in Vitoria and left Vitoria in two track inspection cars, run with gasoline motors, traversing some 80 miles of the Vitoria-Minas track to Colatina where we arrived at 5:00 PM. An obsolete British rule on the railroad requiring every passing car to stop at every station slows up traffic. Much improvement of the road-bed has been accomplished. New ballast has been put in, some curves eliminated by cut and fill, and the grade has been improved. It is a meter gauge track. In many places an entirely new right-of-way has been cut through the steep and precipitous hills. The terrain is very difficult. At Colatina we inspected work being started which will improve the track beyond. A new bridge was being installed at Colatina. The work is being done by Morrison-Knudsen. Reconstructing this railroad is retarding the shipment of ore from the mine as the old track has to be used for much of the way. We boarded a special train provided for us at Colatina and proceeded up the Vale do Rio Doce. During the night we passed through Aimores and Governador Valadares. We stopped the following morning to inspect the site for a hydro-electric plant to supply power for an alloy steel mill to be constructed 5 miles east of Drummond. The power plant will be located on the Piracicaba River at a point where a head of 110 meters is available. At Drummond we noted ore cars on the siding filled with beans although we saw no cars actually hauling iron ore. We noted new box cars, whose trucks and running gear were sent from the United

States, the boxes being built out of Brazilian wood. We did note some pig iron from the Belgo Minera plant at Monlevade being transported. From Drummond to Itabira (now called Presidente Vargas) our train traveled over the original roadbed completed in 1943, which had a steeper grade than any traversed thus far. This section of the road, because of the difficult terrain, is not susceptible to much improvement. The bridges along the Vitoria-Minas railway are 11 tons whereas the locomotives being used are 12 tons. It was explained that this situation is not too dangerous in view of the safety factors allowed.

We arrived at Itabira at 11 AM on the morning of the 15th and were driven to the staff house at Conceicao, originally built by the British. It is a picturesque hacienda type of structure with a beautifully landscaped garden and a clear pool formed by damming the mountain stream. After lunch, Mr. Whitehead, the American Superintendent of the mine, and Mr. Gladding conducted the party by motor to the new reservoir which they are constructing to provide potable water for the mining camp. Then we were driven up the beautifully constructed road encircling Mt. Cauê to its peak where the mining operations are being carried on. It is an unbelievable sight to see a 4,000-foot peak consisting entirely of an outcrop of hematite ore averaging 68% iron. There is no overburden near the top, the ore being mined merely by ledging and drilling slab holes which break the ore causing it to fall to the ledge below where it is shoveled into wooden chutes from which trucks can be loaded at the next lower ledge. The whole operation constitutes an exceedingly simple and relatively inexpensive mining operation. Thus far, 45 feet of the peak of Mt. Cauê has been removed. From the point that the trucks

load to the point where the crushing plant will be built is probably a distance of 2 miles along the road encircling the mountain. From the crushing plant, the ore will be moved by belt to the storage and railway car loading bunkers. The belting and steel supports are in storage at Itabira awaiting installation. Some of the 20-ton Euclid trucks for moving the ore are in Itabira.

Mr. Whitehead, superintendent of the mine, is an American engineer formerly with Phelps Dodge Copper Corporation in Arizona and later in the Philippines. He is an energetic and intelligent individual who seems to be using his ingenuity in improvising as best he can with the equipment he has at hand. He seemed encouraged as he said there had been indications of more support for the enterprise recently. He estimated that the ore reserves in Itabira amount to 40 million tons of hard high-grade hematite averaging 68% in the first lens which outcrops at the top of the mountain. Below that there is a layer of overburden which is not waste but averages 48% iron which compares with the average grade of iron ore on the Mesabi Range in the States which has been running approximately 49%. Below this overburden there is another lens of hard hematite as high-grade as the first outcrop. The total ore reserves are estimated to be 400 million tons. He has confirmed this estimate, which was the original British estimate, through recent development work. Furthermore, there are several outcrops of hematite 100 kilometers to the south of Mt. Caudé. He needs parts for his trucks and the crushing plant equipment, the latter to reduce the size of the chunks of ore which have been creating difficulties in loading at the bunkers at Vitoria. The mining

camp is well equipped with machine shops, carpenter shops, etc., and has undertaken a large company housing development which from the partially completed houses we inspected seemed to be well conceived and practical. Mud huts with thatched roofs are supplied the workers without cost as are some small newly constructed brick houses with tile roofs. One pump and toilet facilities are furnished in the open for each four of the workers' houses. The houses being constructed for the foremen and staff will be supplied with modern sanitary facilities. A new company store is in the process of completion. The railyards seemed adequate. Mr. Whitehead and his staff seemed to be making every effort to convert Itabira into a modern mining camp.

Much remains to be done before the iron ore can be shipped in quantity to the coast. Construction of the crushing plant, installation of the belt to convey the ore from the crusher to the bunkers, completion of the bunkers and installation of railway car loading equipment constitute the principal major factors which should receive immediate attention at Itabira. Completion of the improvement of the Vitoria-Minas railway is essential to movement of the ore in quantity to Vitoria. At present, Mr. Whitehead reports shipment of 200 to 300 tons per day. At the peak 750 tons were shipped, but the construction work on the railway has reduced the present capacity. He hopes that it will soon be possible to ship 450 tons per day. The whole project is a bold and romantic venture which some day should pay out its cost. The key to the situation undoubtedly will be obtaining proper and efficient management of traffic on the Vitoria-Minas railway. The mining problem is relatively simple.

On Wednesday morning, October 16th, the party left Itabira in motor cars at 8:00 AM driving 120 kilometers over tortuous mountain roads to Belo Horizonte the capital of the State of Minas-Geraes. The country was relatively uninhabited and consisted of steep-walled mountains and jungle with occasional clearings with small groups of mud huts. What farming there was was similar to that we had noted in the Rio Doce Valley and was reminiscent of mountain farms in Tennessee and Kentucky. The pastures were almost vertical and deeply eroded. They were grazed by zebu cattle and small mules and horses. Transportation of the natives is by mule cart, horseback, oxcart or pack train. The horses are very small and the mules, resulting from their cross with donkeys, are hardly larger than the burros in the Western states. However, these small mules are an invaluable asset in Brazil, being used much even in the larger towns.

The Vitoria-Minas railway, inadequate as it is for heavy traffic, is a remarkable achievement when one realizes that it was carved out of the hillsides originally without modern equipment - merely by the aid of these small mules and hand labor.

We suddenly came out of the jungle into the small town of Caeté. We saw large, tiled roofs of ancient factory buildings from which small ore cars hauled by mules were emerging. It was a firebrick factory which Dr. Pimenta advised us had been in the family of Dr. Pinheiro, formerly Managing Director of Rio Doce, for four generations. At the entrance of the factory, a long line of Brazilian girls were carrying 20-pound completed firebrick on their heads from one shed to the other. Inside, the crude presses were operated by young girls. The kilns

were fired entirely with wood, as are all the steam locomotives on Brazilian railways.

We also inspected a castiron pipe factory owned and operated by the French near the town of Caeté.

We arrived at Belo Horizonte at noon where we were met by Sr. Lobao of the Central Railway and Sr. Baruto, an engineer from the Companhia Vale de Rio Doce who was most helpful to the party throughout the balance of the trip. After lunch we were driven around the town which was established only 40 years ago as the capital of Minas-Geraes. It has been carefully planned, being separated into an industrial zone where new industries are invited to establish themselves, a residential zone and a recreation area, and has fine boulevards radiating out from the center. Electric power has been supplied for the industrial zone in which there is a Portland Cement factory. The recreation area consists of an artificial lake about 14 miles around with a modernistic yacht club, a garish modernistic church which looks very much like a camouflaged airplane hangar, and which the Bishop has refused to consecrate, and an elaborate brand new casino which was closed shortly after completion. The press was very active at Belo Horizonte and eager to get our reactions.

That night we boarded a special train provided for us by the Central Railway to Barra-do-Pirai.

On October 17th, we arrived at Lafiete at 7:00 AM and inspected the plant of Santa Mathilde, Ltda., which manufactures railway cars. We were joined by Sr. Hollanda, one of the officers of the company, who conducted us through the shops where they were making box cars

out of native Peroba wood. Peroba is a hardwood which grows to great size in the jungle. The boxes are made in the shop and mounted on trucks and running gear supplied from the United States. They are producing four cars a day. They operate their own sawmill in the shops. It is a Brazilian owned company and has been operating for some 20 years. Sr. Montmor is the manager. The cars which they are constructing now have steel framework whereas they were formerly constructed entirely of wood. The Peroba lumber is brought from the Vale do Rio Doce. From Lafiete for a distance of some 80 miles the Central Railroad is undertaking a major reconstruction job reducing its maximum grade from  $2\frac{1}{2}$  to  $\frac{5}{10}$  of 1%, smoothing out the curves and thereby materially increasing the capacity of the railroad. As a result of this work, there will be 70 miles of new road with a constant compensated grade of 1% south of Lafiete.

At noon we stopped at Barbacena for lunch and saw a large textile factory.

Proceeding southward we passed through Juiz-de-Fora where 80 industries are located, including textile, shoe and munitions factories. It is the second largest city in the State of Minas-Geraes. At Barra-do-Pirai there was a long stop. Sr. Lobao of the Central Railroad seemed very much concerned. He finally broke down and told us that the long expected had happened - the locomotive had jumped the track. To relieve the situation, he had the porters serve us promptly with coffee. In order to get us on our way, the steam locomotive was discarded and a diesel-electric summoned from the nearest station. We arrived at Volta Redonda  $2\frac{1}{2}$  hours late at 10:00 PM where we were

met by Mr. Korb, the General Superintendent, and other officials of the company who had an elaborate dinner waiting for us at the guest house which is situated on a knoll overlooking the steel plant. It was a magnificent sight to look down on the mill at night and see this miracle of modern engineering skill in full operation.

A very weary party entrained once more at midnight for Sao Paulo where we arrived at 10:15 AM on Friday, October 18th. We had 45 minutes to check in at the Hotel Esplanada and get back on a special train on the Paulista Railroad for an all day inspection trip. The party was taken in hand by Mr. Cecil Cross, Consul General of the United States, who had arranged everything for us in Sao Paulo. We were joined on the train by several Sao Paulo business men, including Alberto Byington, Dr. Assis Ribeiro, a representative of General Electric, Mr. Heibroner, and Dr. Cintra who was our host and is General Manager of the Paulista Railroad which operates out of Jundiacy where it connects with the Sao Paulo Railway. The Paulista has a system extending 1600 kilometers. Our train ran over the Sao Paulo Railroad track to Jundiacy and then switched to the Paulista track. The Paulista Railroad is privately operated and is a great contrast in every particular to the sloppy operation of the government-operated Central Railroad. The roadbed of the latter is very poor. Fishplates and bolts connecting the rails were found to be more often loose than tight. Derailments are a daily occurrence. However, on the Paulista Railroad the rails are secured to the ties by special clamps, each with two screws instead of spikes. Between the rails and the ties is a small piece of special plywood which serves as a cushion. The grade is compensated on the

curves, the ballast is actually washed semiannually, the rolling stock is in excellent repair, and American railroad equipment would suffer by comparison with the immaculate cleanliness of the under-carriages of the cars. The Paulista is going in extensively for the welding of rail joints. We were given the opportunity of inspecting the rail-welding shop at Rio Claro. One would go far to find a railroad operation which was more efficient. The railroad conducts an apprentice school for mechanics where the sons of Paulista workers are selected at the age of 14 to learn skills under expert guidance. The boys even make their own tool kits and at the age of 18 are eligible to go into the company shops. One official hastened to tell us that the system was entirely democratic in that the boys had no obligation at the age of 18 to stay with the company other than a moral obligation.

At Rio Claro the Paulista officials drove us by motor through the 30 square mile Eucalyptus plantation. The Eucalyptus is not indigenous to Brazil but has been planted because of its rapid growth, primarily for the purpose of supplying fuel for the steam locomotives, another indication of Brazil's lack of coal. The trees are carefully nurtured and are cut at the age of six years. There is a museum on the plantation containing results of the company's experiments with Eucalyptus for other purposes such as furniture making, obtaining of Eucalyptus oils, manufacture of oil of citronella, and many other items which can be made from the different varieties of Eucalyptus. The party was invited to ride on the front of the big diesel-electric locomotive where we had an excellent opportunity to observe the perfection of the roadbed and the banking of the curves which rendered it unnecessary for the train to

slow down in taking them. We observed large coffee plantations along the railroad. Much of the pay load hauled by the railroad consists of agricultural products.

We arrived back at Sao Paulo at midnight.

Mr. Dee Jackson, who is Rio representative of the American International Association for Economic and Social Development, sponsored by Nelson Rockefeller and operated on a non-profit basis under the Rockefeller Foundation, accompanied us on the trip over the Paulista Railroad. He informed us that this Rockefeller Association has undertaken three projects thus far in the agricultural field in Brazil. The first of these projects is to encourage the use of hybrid corn in order to increase the corn crop. In the United States, only 12% of the crop was formerly hybrid corn, whereas it is now 70% and the U. S. corn crop has been greatly increased thereby. In encouraging this in Brazil, Mr. Jackson is working through the Brazilian Ministry of Agriculture and is very much encouraged with the progress being made. The second project is to improve the breeding of hogs where there is much room for improvement. The Brazilian hogs are of a very poor type. The third project is one of establishing health clinics for the wives and families of Brazilian farmers. Mr. Heilbroner, a retired businessman in Sao Paulo who is also working with the Rockefeller Association, accompanied us on Friday and Saturday. During the trip Mr. Jackson pointed out a cotton seed oil plant operated by Swift and Company, which is operating on a large scale.

On Saturday morning, the 19th, the party boarded a train on the Sorocabana Railroad. Mr. Durval Muylaert, in charge of electrification

of the Sorocabana, accompanied us as did several of those who had been with us on the Paulista Railroad the previous day. Substantial progress has been made in electrification of the Sorocabana and the roadbed, the track and the equipment though not of as high quality as that of the Paulista, was definitely superior to that of the Central Railroad. The party returned to Sao Paulo at noon and Mr. Martin and Mr. Sherwood, accompanied by Mr. Cross, the Consul General, and Messrs. Byington, Senior and Junior, attended a livestock show during the afternoon. It was a colorful affair at up-to-date show grounds in the City of Sao Paulo. There was a delay of nearly two hours in the starting of the show due to the fact that the train bringing the Minister of Agriculture from Rio on the Central Railroad was derailed. In addition to the Brazilian national anthem, the band played the "Star Spangled Banner" in honor of the visiting Americans. It was also significant that "God Bless America" was played several times. Mr. Cross explained to us that this song has taken all through South America and has practically become an international anthem.

The show itself was particularly interesting in that very fine specimens of beef and dairy cattle and horses were exhibited. Although the zebu cattle are the primary source of beef in Brazil due to the fact that they are more tick resistant than other breeds and are the only breed which has sweat glands in their skin which makes it possible for them to withstand heat better than other breeds, it was surprising to note that they are also introducing typical American breeds such as the Hereford, the Durham, and the Brown Swiss of the beef types, and the Guernsey, Jersey, Holstein, and Ayrshire of the dairy breeds. The

show closed with a demonstration by several hundred agricultural students who marched in in blue coveralls with rakes and hoes on their shoulders, some pushing cultivators and others driving tractors. The tractors were all Allis-Chalmers. We were informed that the Ministry of Agriculture has undertaken an extensive program of training young agricultural workers in modern scientific methods. Having observed oxen ploughing with wooden ploughs in the interior, we were convinced there was much room for improvement in agricultural technique.

On Sunday, October 20th, the party traveled over the Sao Paulo Railroad to Santos by special train. Due to the fact that there is a difference in elevation between Sao Paulo and Santos of 2500 feet, the train has to be attached to a cable in order to descend the steep mountainous terrain, dropping 790 meters in 11 kilometers. The descent on the cable is in five successive stages. The cars and the locomotives are attached to the cable. It is a remarkable engineering feat constructed by the British. This particular section has a rainfall of approximately 200 inches a year and the danger from landslides has been overcome by an elaborate system of retaining walls, terraces, and culverts. One wonders why with all of the potential water power, the locomotives and the engines running the drums which wind the cable are wood-burning. The Sao Paulo Railroad has just been acquired from the British, and the decision is pending as to whether it will be operated by the Brazilian Government or turned over to a private railroad company. The businessmen of Sao Paulo seemed to be unanimous in hoping that it will be placed under the management of the Paulista Railroad.

Mr. Cross and Mr. Byington, Jr., accompanied us on this trip, and

the Vice Consul conducted us around the port of Santos. Unfortunately, it was Sunday and the port was not operating. However, he informed us that there were 47 ships in port. One of the main exports from this port is coffee, and an elaborate loading mechanism is installed for transferring the coffee from railway car to ship with a minimum of hand labor. It consists primarily of a system of conveyors running from manholes in the street where the coffee is dumped from the cars. The port with its present facilities is capable of handling 25,000 tons of cargo a day. It appeared that the docks could be extended a mile or so if necessary. There is an excellently protected harbor, and it is the second largest port on the East Coast of South America, Buenos Aires being the first. However, the port of Santos is a bottleneck due to the difficulty of transporting discharged cargo inland. The only outlets by rail are the cable railway described above which has limited capacity and a round-about railroad operated by the Sorocabana. There is a spectacular, serpentine road between Santos and Sao Paulo. A new truck road is under construction and will be completed within one year. This will undoubtedly help to relieve the congestion. Another factor contributing to the congestion is the fact that storage is cheaper at Santos than at Sao Paulo, and many Sao Paulo merchants elect to leave their goods in Santos until they are ready to dispose of them. In addition to the full warehouses in Santos, we saw large quantities of railroad equipment stacked in the open.

The party returned to Sao Paulo at 5:00 PM.

On Monday, the 21st, the party attended a luncheon of the American Chamber of Commerce of Sao Paulo arranged by Mr. Cross. The luncheon party consisted of a small group of 15 or 16 Sao Paulo businessmen, and

the luncheon was followed by an informal discussion led by Mr. Martin in which he explained the general relationships of the International Bank and the Export-Import Bank with particular emphasis on the fact that the former is assuming the major reconstruction lending responsibility. An item in one of the Sao Paulo papers had stated that the Export-Import Bank mission had come to Brazil for the purpose of buying farms and industrial plants. We had been harassed at the hotel with offers of farms, and we took the occasion of the Chamber of Commerce luncheon to announce that the Export-Import Bank delegation had come to Brazil for other purposes.

In the afternoon Mr. Cross drove us around Sao Paulo and showed us the Sao Paulo airport. The air was full of planes trying to land and trying to take off, and it appeared that the airport facilities were wholly inadequate. The runway is not fully paved and consists mostly of grass and dirt. The airport terminal is a small structure, and the whole airport appeared to be wholly inadequate for the traffic which it is attempting to handle. We were informed that the airlines are carrying many more passengers between Sao Paulo and Rio than is the Central Railroad. Due to the difficult and crowded conditions of the airports at Rio, it would appear that an alternate airport at Sao Paulo capable of handling the large DC-4 transports is needed. Later in the afternoon Mr. Martin, accompanied by Mr. Cross, Mr. West, and Mr. Sauer, accepted an invitation to visit the Sao Paulo stock exchange and cotton exchange.

The party left Sao Paulo that evening on the "Cruzeiro do Sul" which is the crack train on the Central Railroad, for Rio. This was the only steel train on which we rode while in Brazil. The cars, furnished from the United States about 20 years ago, appeared to be in good condition,

although the roadbed was very rough.

### Chapter III

On Tuesday, October 22nd, we arrived back in Rio at 9:00 AM and checked in at the Gloria Hotel once more. An informal conference was held in the hotel attended by Mr. West and the other members of our party. We discussed a copy of the letter of intent from the Brazilian Government which had been received during our absence from Rio and a cable indicating that Mr. Clayton and Ambassador Pawley considered the letter unsatisfactory. Mr. West pointed out that in our communication to the Brazilian Government we had asked for 350 million cruzeiros to complete the Rio Doce project and that in the letter of intent the Government of Brazil stated by inference that it was requesting an allocation of 450 million cruzeiros in addition to the 50 million cruzeiros allocated in September of this year. Mr. West pointed out that if the Brazilian Congress granted such request, more money would be made available for the completion of the project by the Brazilian Government than we had requested. Mr. Sauer said that the letter, though ambiguous in some respects and needed clarification as to the amounts involved, was probably all that the Brazilian Government could do at this time; that is, that the government had to predicate its assurance on action of Congress. Mr. West stated that it had been estimated that 350 million cruzeiros would be required to complete the project and in his opinion, 500 million would be sufficient. Mr. West pointed out further that the Banco do Brasil was committed to provide 30 million cruzeiros at the rate of 5 million cruzeiros a month for six months,

which would be inadequate. Mr. West also suggested that the situation might develop, if the Brazilian Government put in the cruzeiros stated in its letter of intent, whereby there would be a deficiency of dollars which could result in the withdrawal of the Morrison-Knudsen contract, with consequent slowing up of the work by reverting to the old basis. Mr. Sauer pointed out that it was necessary that something be done to implement the letter of intent. At the conclusion of the meeting, it was decided to postpone further discussion pending the meeting which had been arranged with Mr. Daniels, Chargé d'Affaires at the American Embassy, that afternoon. Mr. Whitcomb reported that he had looked into the proposed Sorocabana State Railway Credit and had obtained the opinion from reputable people in Sao Paulo that the State of Sao Paulo was a better guarantee than that of the central government. He also reported on the exchange assurance problem which had been transferred from the Banco do Brasil to the Superintendencia da Moeda e do Credito of the National Treasury.

In the afternoon, Martin and Sherwood edited a draft furnished by the American Chamber of Commerce of Rio of Mr. Martin's remarks at the occasion of their luncheon on October 11th, while Mr. Sauer and Mr. Whitcomb visited Humberto Moletta at the Banco do Brasil, concerning the Bessa matter.

At 3:30, Martin and Sherwood met Mr. Sauer and Mr. West at the American Embassy for a meeting with Paul Daniels, Chargé d'Affaires. Mr. Brooks and Mr. Clark of the Embassy staff were also in attendance. Mr. Daniels produced a file of cables which had been received from Washington, including a paraphrase of Mr. Gaston's cable reporting the action of the Board on the Rio Doce matter at its special meeting held on October 18th. It was the consensus of opinion of the group that this telegram made it

clear that actual appropriation of funds for Rio Doce rather than a mere letter of intent was a condition to the establishment of any further credit for Brazil. Mr. Daniels also reported that Ambassador Pawley had held a half-hour telephone conversation from the States with Foreign Minister Gracie indicating that the letter of intent was unsatisfactory and insisting that any statement concerning a reference to the Brazilian Congress be eliminated from the letter. It was thought by those present that Mr. Pawley's suggestion did not meet the issue involved since the government could not act without the approval of Congress. Mr. Daniels then showed us a cable he was preparing as a result of his discussion with Foreign Minister Gracie following the Ambassador's telephone call in which Mr. Daniels pointed out several facts in the situation which would indicate that the letter of intent was in many ways satisfactory and possibly as far as the Brazilian Government could go at this time.

After considerable discussion, it was decided that it would be advisable for Mr. Martin to have a talk with the Foreign Minister and pay a courtesy call on the new Minister of Finance, Sr. Castro. Mr. Daniels arranged the meeting with the Foreign Minister for Thursday at 12:00.

The question was also raised as to whether Mr. Martin should make a general statement to the press before leaving Rio. It was suggested that this be taken up with the Public Relations Officer at the Embassy.

On Wednesday, October 23rd, Mr. Martin and Mr. West attended a meeting of the Board of the Companhia Vale do Rio Doce. Dr. Pinheiro, though not a member of the board, was in attendance.

Mr. Sauer, Mr. Whitcomb, and Mr. Sherwood attended a luncheon given by Mr. Brooks of the Embassy for Sr. Vieira Machado, Superintendent of Money and Credit in the Department of the National Treasury. Sr. Machado seemed to be a forthright individual who welcomed the opportunity to deal directly with the Bank on the exchange assurance problem. He had given Mr. Brooks a letter addressed to the Bank, acceding to the Bank's proposals for a special register of exchange requirements for servicing Eximbank loans.

Mr. Martin and Mr. West attended a luncheon given by Dr. Artur Souza Costa, Chairman, House Finance Committee. The others present at the luncheon were:

Dr. Israel Pinheiro, former President CVRD, now member House  
Finance Committee  
Sr. Assis Chateaubriand, Newspaper Publisher  
Sr. Walter Moreira Salles, Director Banco Moreira Salles S/A  
Sr. Horacio Lafer, Majority Leader of Brazilian House of  
Representatives

On Wednesday afternoon, Mr. Martin, Mr. Sauer, and Mr. Sherwood went sailing on the "Vendaval", a 60-foot yawl owned by Sr. Jose C. Pimentel Duarte. This diversion had been arranged by Mr. Hollanda of the Santa Mathilde, Ltda. Mr. Hollanda had accompanied us on part of our trip. We sailed through the harbor and out into the ocean and had a delightful afternoon.

Mr. Whitcomb interviewed Mr. Vaughn of feather flower fame and others during the afternoon.

On Thursday morning, October 24th, our last day in Rio, Mr. Martin had a private talk with Col. Macedo Soares at the Gloria Hotel. Col. Soares had been replaced by Sr. Pestanha as Minister of Transport while we were on our trip through the interior. At 11:30 Mr. Martin and

Mr. West joined Mr. Daniels at the American Embassy and went from there to call on Foreign Minister Gracie.

At noon the entire party, including Mr. West, attended a farewell luncheon given at the Jockey Club by Officers and Directors of the Companhia Siderurgica Nacional. Dr. Oscar Weinschenck, Vice-President, Sr. Armando Vidal Leite Ribeiro, Director-Treasurer, Dr. Paulo C. Martins, Technical Director, and Col. Macedo Soares were present. Dr. Weinschenck read a statement giving full credit to the Export-Import Bank for the part it had played in making it possible for the steel mill at Volta Redonda to become a reality. He expressed the great appreciation felt by Brazilians for the assistance which the United States had rendered and expressed gratitude to Mr. Martin and the other members of the party for having come to Brazil to see the dedication of the steel mill, and for the interest which they had taken in the problems facing Brazil. He expressed hope that this type of cooperation would continue. Mr. Martin made an appropriate reply expressing appreciation for the courtesies and assistance rendered by the officers and directors of the steel company in making it possible for us to gain as much first-hand information as possible about what Brazil is doing toward industrial development. He stated that the steel mill at Volta Redonda was a magnificent achievement and that the Export-Import Bank is proud to have participated in the enterprise. Toasts were proposed by Mr. Sauer and Mr. Sherwood to the success of the steel mill and to the continuance of United States-Brazilian cooperation.

At 3:30 Mr. Martin, Mr. Daniels and Mr. West called on Mr. Correia e Castro, the Minister of Finance. Mr. Martin has submitted a separate memorandum to the Board covering those conversations.

Mr. Sauer and Mr. Sherwood worked on a statement for the press during the afternoon and later with Mr. Martin, attended a farewell party at Mr. Paul Daniels' house. Mr. Sherwood gave the statement for the press to Mr. Daniels to be issued by him, in his discretion, and in the event that the interest exhibited by the press throughout our stay in Brazil made it advisable for a general statement to be made by Mr. Martin on his departure.

On Friday morning, October 25th, the party left Rio from Galihao airport at 9:00 AM in a Pan American DC-4 which had to return to Rio after an hour's flight due to an oil leak in No. 4 motor. Emergency repairs were made at the airport, and we took off again at 11:55 AM, stopping at Belen, Port-of-Spain, San Juan, and arriving at LaGuardia Field the following day, October 26th at 3:00 PM.

#### Chapter IV

The party was unanimous in arriving at the conclusion that the outstanding problem confronting Brazil, and the one demanding the highest priority, is that of transportation. Without adequate transportation in the Vale do Rio Doce, the vast deposits of iron and other minerals cannot be developed and moved to the seaboard in sufficient quantities to constitute profitable operation. Likewise, the lack of adequate transportation in the vast region behind Sao Paulo prevents the large quantities of agricultural products, including beef, from being moved in sufficient quantities to the large centers where there is a deficiency of food for the general population. Rio is enjoying three meatless days a week with large quantities of beef cattle locked in the

interior. It would appear that the two avenues to the interior are those just mentioned, the Vale do Rio Doce and the hinterland of Sao Paulo.

Rio is a relatively isolated city on the seacoast, hemmed in by mountains. Sao Paulo appears to be the center of real business activity and will undoubtedly develop rapidly if present efforts to solve the transportation problem between it and the port of Santos are successful.

However, there is one disturbing factor in Brazil's approach to this transportation problem. One sees construction on a broad highway leading out of Rio with no particular purpose, while the money spent on it should be sufficient to pave the highway between Sao Paulo and Rio, which would constitute a much needed link between the two largest cities of Brazil, particularly in view of the bad condition of the Central Railroad linking the two cities and the inadequacy of the airport at Sao Paulo. One cannot help but wonder if Brazil is not, in a sense, attempting to skip the normal phase of construction of railroads and highways by plunging into the age of air transportation. However, iron ore and other heavy products, now locked in the interior, can be moved to the sea only by railroad.

One is also disturbed by a similar impression that Brazilians may be attempting to skip the phase of agricultural development and trying to plunge into a highly industrialized economy. In other words, Brazil gives the impression of being a new democracy relieved from a regime which had become increasingly dictatorial, full of energy and resource but confused as to direction. Brazilians are filled with national pride and are determined that the resources of the country shall be developed under Brazilian and not foreign control. Sincere and real friendship

for the United States is everywhere in evidence. Brazilians desire to have the benefit of technical assistance from the United States, but they will resist control by United States interests or those of any other foreign power, particularly those seeking to penetrate from the South and from across the sea. There is a fear that, if assistance and cooperation from the United States should decline, Brazil might be forced to lean on one of these alternatives. Brazil has the immediate problem of combatting an extreme inflation, and it would seem that the country would benefit if there were some central banking system similar to the Federal Reserve System in the United States. The situation is aggravated by the tendency of the Brazilians to invest their money in real estate and large modern buildings, such as the apartment houses in Rio, which are less needed at this stage than better transportation facilities and basic industry. There should be some means and inducement whereby Brazilian capital might be put into productive enterprise.

Next in importance to transportation is the problem of management which is complicated by the desire of Brazilians to control their own development projects. The bold venture at Volta Redonda may well prove to be the turning point in the industrial development of Brazil if properly managed. Likewise, on completion of the relocation of track and improvement of the Vitoria-Minas Railroad, the success of the whole Rio Doce project, including the exploitation of Itabira iron ore, will depend primarily on the management of the operations of the railroad. Without proper control of traffic, adequate tonnages cannot be moved.

Brazil is a great American market. This fact is impressed on one

both in the larger centers and in the interior where American wares from automobiles to barber shop equipment are in evidence. A Chevrolet or a Ford sign in a small mud hut village in the interior is not only a great tribute to American enterprise, but is striking evidence that Brazil is a valuable outlet for products of American industry.

Brazil is a coming country. One gets the impression that it is a great colossus in danger of trying to learn to run before it tries to walk. With the friendly cooperation of other nations, combined with good administration within Brazil, there can be no doubt as to Brazil's great future. The resources and the energy are there.

Sidney Sherwood  
Secretary