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DEPARTMENT OF STATE
AGENCY FOR INTERNATIONAL DEVELOPMENT
ALLIANCE FOR PROGRESS
WASHINGTON, D. C. 20523

CAPITAL ASSISTANCE PAPER

BOLIVIA - CORPORACION MINERA DE BOLIVIA

AID-LA/P-79

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ALLIANCE FOR PROGRESS

DEPARTMENT OF STATE
AGENCY FOR INTERNATIONAL DEVELOPMENT
Washington, D. C. 20523

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March 3, 1966

MEMORANDUM FOR THE ADMINISTRATOR

SUBJECT: BOLIVIA - Corporacion Minera de Bolivia

The attached Capital Assistance Paper sets forth the recommendations for authorization of a loan not to exceed \$1,100,000 to assist in financing the third and final phase of the COMIBOL Rehabilitation Plan.

David Bronheim
Deputy U.S. Coordinator

Attachments:

Summary and Recommendations
Project Analysis
Annexes I - V
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CORPORACION MINERA DE BOLIVIA
(COMIBOL)

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CORPORACION MINERA DE BOLIVIA
(COMIBOL)

SUMMARY AND RECOMMENDATIONS

1. Borrower: Corporacion Minera de Bolivia (COMIBOL) with the full Guarantee of the Central Bank of Bolivia.
2. Amount of Loan: Not to exceed \$1,100,000.

3. Other Financing:*

	<u>Dollar Equivalents</u>	<u>Local Currency</u>
Inter-American Development Bank	\$2,459,000	\$ 41,000
Federal Republic of Germany	<u>1,500,000</u>	<u>-0-</u>
Total Non-U.S.	<u>\$3,959,000</u>	<u>\$ 41,000</u>
<u>Other U.S. Contributions:</u>		
P.L. 480 Title I		\$1,000,000
Surplus Commodities Under P.L. 480 Title IV	<u>\$4,000,000</u>	<u> </u>
	\$7,959,000	\$1,041,000
Total Other Financing	\$9,000,000	
Total Cost of Project	\$10,000,000	

4. Purpose: The purpose of the loan in conjunction with the loans of the two other partners of the "Triangular Operation,--the Federal Republic of Germany and the Inter-American Development Bank--is to implement the third and final phase of the COMIBOL Rehabilitation Plan pursuant to the original Memorandum of Understanding of June 1961 and the Supplementary Protocol of October 11, 1965. Specifically, the objective of this phase is to assure that COMIBOL continue to operate on an economically viable basis. By achieving this objective, COMIBOL will provide resources to the Central Government rather than be the drain on the economy that has characterized its operation since 1952.

* The IDB paper has been informally presented to its Board of Directors. Approval is expected by February 28, 1966. Since the IDB is acting as financial agent for the Kreditanstalt fur Wiederaufbau (Government of Germany), approval may be similarly expected from that partner.

ANNEX I	External Debt and Repayment Capacity
	A. Summary
	B. Present External Public Debt
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	D. Debt Service Schedule
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ANNEX III	Engineering Tables
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	Exhibit B. Yearly Production Averages 1961 - 1964
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APPENDIX I-B	(b) January 12, 1966
APPENDIX II	Findings of the Review Group - August 1965

This phase consists of financing:

- a) extraordinary exploration
- b) metallurgical research
- c) purchase of material and equipment
- d) expansion and improvement of concentrators
- e) costs of additional staff members and consultants to improve the COMIBOL technical and administrative organization
- f) cost of the Advisory Group for a period of two years
- g) commissary supplies to be used for a lay-off program of approximately 4,800 miners.

The funds from the U. S. development loan (\$1.1 million) will be used to finance (1) the purchase of U.S.-made materials and equipment, and (2) the U. S. cost portion of certain administrative and technical services rendered to COMIBOL.

5. Loan Administration: The proceeds of the loan will be applied to the purchase of equipment and personal services of U. S. origin through the use of the Letter of Commitment procedure. The loan funds will be utilized in the following three ways:
 - (1) \$444,000 will be applied to the purchase of equipment and materials.
 - (2) \$117,000 will be applied to cover 1/3 of the cost of maintaining the Advisory Group.
 - (3) \$509,000 will be used to strengthen COMIBOL management by providing the services of engineers, geologists, and managerial consultants from the United States.
6. EX-IM Bank Clearance: The EX-IM Bank has indicated that it has no interest in this project.

7. Views of the Country Team: The Embassy/USAID strongly endorse the proposed loan.
8. Statutory Criteria: The statutory criteria of the Foreign Assistance Act have been met. (See ANNEX II)
9. Recommendation: Authorization of a loan to the Corporacion Minera de Bolivia in an amount not to exceed \$1,100,000. The Loan shall be subject to the terms set forth below.
 - a) The Borrower shall repay the loan to A.I.D. in United States dollars within thirteen (13) years from the first disbursement under the loan including a grace period of not to exceed three (3) years. The Borrower shall pay to A.I.D. in United States dollars interest at the rate of four (4) percent per annum on the disbursed balance of the loan.
 - b) If the Government of Bolivia so elects, then the Borrower shall fulfill its United States dollar obligations under the loan by paying to the Government the equivalent in the currency of Bolivia of the United States dollars amount payable to A.I.D. under (a) above, and, in such event, the Government shall pay to A.I.D.:
 - (1) The principal of the loan in United States dollars within forty (40) years, including a grace period of not to exceed ten (10) years from the date of the first disbursement under the loan.
 - (2) An interest rate in United States dollars of two and one-half ($2\frac{1}{2}$) percent on all amounts of outstanding principal paid by the Borrower to the GOB from the respective dates of such payment of principal, except during the grace period in which the interest rate shall be one (1) percent per annum.

c) Other Terms and Conditions

The loan shall be subject to the terms and conditions found in
(1) the Supplementary Protocol of October 11, 1965 (Part IV), and
(2) Special Terms and Conditions (Part V).

These may be stated in brief as follows:

- i) The Advisory Group shall continue to function effectively throughout the disbursement of the loan.
 - ii) The decrees issued by the Bolivian Government in May 1965 to rationalize wage levels and reestablish managerial authority shall continue to be enforced to the satisfaction of A.I.D.
 - iii) Future royalty payments shall be made subject to COMIBOL's capacity to pay after meeting all obligations, particularly those of the Triangular Operation.
- (3) As a condition precedent to the disbursement of the loan, it must be ascertained that the Inter-American Development Bank and the Federal Republic of Germany have authorized their respective loans.
 - (4) U.S. Excess Property requirements must be considered in connection with procurement of equipment from the United States. This equipment shall be obtained from the A.I.D. stock of reconditioned Excess Property to the extent that the Advisory Group (see p. 16) finds this technically suitable.

The Advisory Group will be fully responsible for the Borrower in examining the availability of such excess property and to make the technical judgment as to its suitability for use in the project. Prior to the procurement of any new equipment, the Advisory Group will indicate, in writing, to A.I.D. either that such equipment is not available from A.I.D. reconditioned excess property stocks on a timely basis, or that the equipment which may be available is not suitable for use in the project.

I. PROJECT DESCRIPTION AND BACKGROUND

A. The Borrower

The Corporacion Minera de Bolivia (COMIBOL) was established by the Government of Bolivia by Supreme Decree No. 3196 of October 2, 1952, and was reorganized by Supreme Decree No. 4458 of July 18, 1956. It is an autonomous public institution with responsibility for the administration of the nationalized mines. COMIBOL's principal purposes are to explore, exploit, and process the ores of its mineral deposits and market and export the mineral products produced.

B. History and Background

COMIBOL, is a vital element in the nation's economy accounting for nearly 50% of the country's foreign exchange earnings, and being the largest single employer in Bolivia. Its chronic deficits since 1952 have constituted a financial drain on the economy, and its virtual domination by extremist mine union leaders has been a major source of social and political unrest within the country.

U.S. assistance to COMIBOL began in 1961 with the first phase of Operation Triangular in which the United States participated jointly with the Federal Republic of Germany and the Inter-American Development Bank. The purpose of Operation Triangular, conceived as a three-phase operation, was to achieve the rehabilitation of COMIBOL through inputs of capital and technical assistance by the external financing partners, together with internal operational reforms, particularly in the area of labor-management relations, to be undertaken by COMIBOL with the backing of the Bolivian government. U.S. assistance to COMIBOL under the first two phases of Operation Triangular totalled \$14 million, including \$8.5 million in loans and \$5.5 million in PL 480 commodities. An additional \$13.5 million in local currency loans for deficit financing purposes was supplied to COMIBOL by the U.S. Government between 1961 and 1964.

A Review Group consisting of representatives of the three Triangular partners presented a report in February 1965, following its detailed analysis of the results achieved during the first two phases. It found that overall results under the first two phases up to that time were disappointing, and were not adequate to justify financing of a third phase.

Some favorable results had been achieved, including a 20% increase in production between 1961 and 1964; an intensified exploration program which has produced positive findings; upgrading and expanding COMIBOL's supply of equipment and machinery and its inventories of spare parts; improvements and cost reductions in procurement and handling of medical equipment; and a net reduction of 3000 (to a level of approximately 25,000) in the COMIBOL labor force.

None of these improvements, however, compensated for the failure of COMIBOL and the Bolivian government to achieve a dramatic change in the crucial area of labor discipline. Until June 1, 1965, labor unions and their radical leaders were virtually managing the mines. Because managerial authority was constantly vitiated, there was also a decline in management quality. Principally for these reasons, COMIBOL production costs showed an alarming rise, especially during the twelve-month period ending June 1, 1965.

After some initial hesitation arising largely out of its inexperience with the COMIBOL problem the Bolivian Military Junta decided, in early May 1965, that the rapidly worsening COMIBOL situation could only be dealt with by a series of firm measures aimed at cutting costs and restoring effective management authority. In reaching a decision on the kinds of steps required, the government, in marked contrast to its predecessor, consulted with and made effective use of the COMIBOL Advisory Group, established by the Triangular Partners to monitor COMIBOL's operations on their behalf.

Under the decrees issued by the Bolivian Government in May 1965,* base wages were set at a uniform level throughout COMIBOL; all bonuses were abolished and replaced by a system of profit sharing; drastic penalties were established for such malpractices as are theft, unjustified absenteeism, worker insubordination, and refusal to permit equipment transfer. Several score mine union leaders were fired and deported and the armed forces temporarily occupied the mines to insure compliance with the decrees. Following a brief and unsuccessful effort by the extremist labor leaders to challenge the government's actions, the miners returned to work. Except for the ten day general strike in September, there have only been sporadic work stoppages since June.

*The text of the appropriate decrees may be found in Appendix I.

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An evaluation of results following the May decrees has shown substantial changes for the better in almost all areas of COMIBOL's operations. Specifically, a second Review Group meeting in the latter part of August reached the following conclusions:

1. Ore theft has been reduced. In the two principal mines in which serious theft continues, specific measures are being taken to control it.

2. Absenteeism has declined significantly.

3. Mine machinery is now being moved freely as needed from mine to mine.

4. Operating costs have declined sharply. COMIBOL's average monthly loss for the first four months of 1965 was \$800,000 per month. This was converted to a \$600,000 surplus in June, and \$678,000 in July. COMIBOL has maintained an estimated average monthly profit of \$550,000 for the last eight months of 1965.

5. Both tin content of ores and tin recovered in milling rose in June and July, compared to the first five months of the year. In one mine (Colquiri) tin content rose 15% between May and August. This is an excellent indicator of the decline in theft of high grade ores.

6. COMIBOL up to October 31, 1965, has reduced its total labor force by approximately 2600 workers,* in addition to the reduction of 3000 in the labor force achieved in the years 1961-1964.

The second Review Group, on the basis of the above data, reached the following conclusion:

"Since the implementation of the May decrees COMIBOL has made substantial progress in the areas listed above. Data on costs are not yet conclusive because of the limited period of time for which they are available. Also because of the limited time period with which we have had experience, it is not entirely certain to what extent COMIBOL will be able to continue to implement the decree provisions effectively. Nonetheless, based on the progress made to date, it seems clear that COMIBOL has been more effective in complying with the rehabilitation commitments.

* A more detailed listing of these findings may be found in Appendix II.

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of Operation Triangular in the last three months than it has been in the previous three years. Some of the steps needed to achieve full rehabilitation cannot be fully executed without additional financial assistance. These include upgrading of management quality, improvement in metallurgical practices and reduction in labor force. Most of the points criticized in the Review Group report of February 1965 have been shown substantial improvement. Both actual operations and the prospects for improvement in COMIBOL appear better today than they did at the time the Triangular Partners agreed to finance the second phase."

An evaluation of the remainder of 1965 shows the same generally favorable trend. One area in which adherence to the May decrees was only partially successful was in the maintenance of the wage decrease. In November COMIBOL granted its employees a wage and salary increase with an overall cost of \$2.4 million per year. While this is a substantial increase, it should not obscure the fact that a uniform wage system has at last been instituted in all the mines and that the cost of wages and salaries has been reduced from \$27.3 million in CY 1964, to an estimated \$23.3 million in CY 1965 in spite of the November 1965 wage increase.

On January 12, 1966, the Government of Bolivia issued Supreme Decree No. 07474* which, makes non-interference by government organizations outside of COMIBOL a point of law. The Decree also relieves COMIBOL of some of the extraneous expenditures with which it has formerly been burdened. Notably, payments to several universities, secondary schools, and other institutions will now be assumed by the Government, thus providing future cost savings for COMIBOL. It is felt that this new Decree is as important for the rehabilitation of COMIBOL as the Decree of May 1965.

* Summarized in Appendix I.

II. ENGINEERING ANALYSIS

A. Description of Project

The project is for a continuation of the rehabilitation of the mining enterprise of COMIBOL; the proposed work now under consideration represents the third and final phase of the total Rehabilitation Plan, and the following program as now proposed will require \$10,100,000 in new funds as follows:

	In Thousands	
	\$	
1. Search for new reserves	1,400	13.9%
2. Development work at producing mines	1,517	15.0%
3. Metallurgical research	0,500	4.9%
4. Mill expansion and improvement	0.341	3.4%
5. Commissary and lay-off program	4,000	39.6%
6. Technical and Administrative Assistance		
(a) Technical assistance	1,592	15.0%
(b) Advisory Group	0.390	3.9%
(c) Improvements to staff functions	<u>0.360</u>	3.6%
Total	10,100	

Of the total, A.I.D. is to provide \$1,100,000 in development loan funds as follows:

\$444,000 for equipment, materials, and spare parts to be procured in the United States; \$509,000 for salaries of U.S. personnel employed for technical assistance; a maximum of \$117,000 to cover the U. S. cost portion of the Advisory Group. A.I.D. will also provide the equivalent in PL 480 local currency funds (104g) of \$5,000,000 to cover the following local costs: \$640,000 for local mine development labor; \$40,000 for local mill expansion labor; \$320,000 for technical assistance support labor; and up to \$4,000,000 over a three to four year period for commissary foods with the local currency generated therefrom being utilized to cover costs of a lay-off program.

The remaining \$4,000,000 of the total Third Phase will be provided by the Inter-American Development Bank and the Federal Republic of Germany in the amounts of \$2,500,000 and \$1,500,000, respectively.

B. Implementation Plan

The work for the third and final phase of the Rehabilitation Program is scheduled to be completed during a two-year period (except the lay-off program) and all activities completely phased out approximately three months thereafter.

1. Exploration Program

Reserves adequate to ensure repayments of all loans continue to be a critical factor. Some improvements in reserves has been noted; a larger step forward in this will be accomplished with the development of areas both in the mines and outside the mines which have been defined by the geological exploration program of the second phase.

It is COMIBOL's intention to maintain the exploration activity at its present level. Principal areas to be investigated are indicated in the Index Map of Bolivia, Annex III, Exhibit A.

Sixteen foreign geologists are at present in the field, and will be retained for a two-year period. Replacement of the transportation vehicles for these personnel is required.

2. Mine Development Program

A U.S. consultant will be engaged to provide services to plan designs and layouts for new mining plant and improve existing plants.

Seven of the present mines will be developed in depth by sinking of shafts. Descriptions of work proposed for each of these shafts including justifications follow:

Cruz Shaft--Huanuni - 110 meters

Diamond drilling has indicated that at least 110,000 tons of 1.2 percent tin will be developed by this shaft. The whole area at the level this shaft will reach is virgin.

San Juanillo Shaft - Colquiri - 115 meters

Colquiri mine is developed to the -285 level and the extraction from this level is by an incline which now is extended outside the mineral zone. The shaft will bring the entry back into the mineralized zone and facilitate movement of ore materials and men.

Carlos Shaft - San Jose - 170 meters

Being deepened to reach the Colorado Vein ore for which diamond drilling indicates grades 1.72 percent tin and 2.45 DM silver over a width of 75 cm.

San Jose Shaft - San Jose - 170 meters

Diamond drilling has indicated continuity to this depth of the San Jose, Bronce, and Purisima Veins.

Santa Fe Shaft - Santa Fe - 60 meters

Santa Fe mine has not been exploited in depth. Diamond drilling has indicated ore below the present lowest level.

180-330 Shaft - Caracoles - 174 meters

This shaft will be raised to facilitate working in the upper levels of the mine. Up to now because of the lack of adequate facilities for getting men and materials to the upper levels working here has been delayed.

14 Level Shaft - Corocoro - 14 to 17 levels

This shaft is intended to develop reserves indicated from diamond drilling carried out by the former owners, American Mining and Smelting Company.

The backlog of 44,000 meters of diamond drilling recommended by the exploration program is projected to be completed in the next two years; of this quantity approximately 22,000 meters will be undertaken at presently productive mines.

Tunnelling on the Ocavi (Colquiri) and Malmisa to get information for mining programs; layouts will require driving 2,000 meters of access openings to the mineralized zones.

Seven cross-cut tunnels will be driven in the present mines totaling 6,045 meters. These cross-cuts are described in the "Exploration by Major Cross-cuts Program for 1965, 1966 and 1967" below:

CHOROLQUE

Fierro Hunu XC (800 meters long)

Based on projected strikes and dips to cut and explore on 17 level, four veins known on the San Bartolome level, 60 meters above, and the Colon vein known on the 12 level, 175 meters above.

TASNA

Mariana XC (950 meters long)

Based on projected strikes and dips to explore four veins known in the Deseada Mine, 40 meters above, and two veins known in the Mariana Mine, 90 meters above.

6 De Agosto XC (450 meters long)

To explore two geophysical anomalies and then based on projected strikes and dips intercept two veins 60 meters below the lowest workings.

ANIMAS

Chocaya XC (1,100 meters long)

Based on projected strikes and dips to explore in depth the several veins formerly worked in Gran Chocaya, roughly three to three hundred fifty meters below their lowest workings.

COLQUIRI

OGAVI XC (1,600 meters long)

To explore two zones of mineralization formerly worked on the surface, roughly 120 meters below the old workings.

HUANUNI

Porvenir XC (600 meters long)

To explore area between the Huanuni and Porvenir Mines, 200 meters below the Patino level.

CARACOLES

Jacha Pacuni XC (300 meters long)

To explore the area between Jacha Pacuni and Barrancos.

Pepita XC (245 meters long)

To explore the area between Jacha Pacuni and Pepita Mine.

Total cross-cutting program = 6,045 meters.

The breakdown of funding for the combined Exploration and Mine Development Programs follows:

(In thousands of U.S. dollars or equivalents)

<u>Item</u>	<u>Germany Portion US\$</u>	<u>A.I.D. Portion</u>		<u>I.D.B. Portion</u>		<u>TOTAL</u>
		<u>Loan US\$ Costs</u>	<u>PL 480 Funds Local Costs</u>	<u>US\$ Costs</u>	<u>Local Costs</u>	
Exploration	475	-	-	925	-	1,400
Mine Development	383	444	640	-	-	1,467
Planning Consultant	-	50	-	-	-	50
Totals	858	494	640	925	-	2,917
	29.5%	16.9%	21.9%	31.7%		

3. Metallurgical Research Program

COMIBOL will continue active research and investigation in the metallurgical-mineral dressing field.

Research over the past three years has, both in Bolivia and abroad, developed the outline of certain ore dressing processes that may have applications in COMIBOL's mills.

Several of these processes have indicated promising laboratory results and will require testing on a commercial scale in Bolivia. When proved successful, probably modifications will be required in one or more of the present plants.

4. Mill Expansion and Improvement Program

Mills at four COMIBOL's mines will be modified to meet changing conditions.

1) The Tasna bismuth concentrator capacity will be doubled from 50 tons per day to 100 tons per day.

2) The Telamayu concentrator will be modified to receive tin ores from the Chorolque Mine.

3) The Santa Fe concentrator will be modified to recover silver which is now economic due to the increase in price.

4) The Velarde Mill at Potosi requires renewing of the crushing section.

The breakdown of funding for the combined Metallurgical Research and Mill Expansion and Improvement follows:

(In thousands of U.S. dollars or equivalents)

Item	Germany Portion US\$	A.I.D. Portion		I.D.B. Portion		TOTAL
		Loan US\$ Costs	PL 480 Funds Local Costs	US\$ Costs	Local Costs	
Metallurgical Research	-	-	-	500	-	500
Mill Expansion	58	-	39	244	-	341
Total	58 6.9%	-	39 4.6%	744 88.5%	-	841

5. Combined Lay-Off and Commissary Supply Program

COMIBOL have planned for a reduction of up to 4,800 workers over the next several years; estimated cost of this program would be U.S.\$ 4,000,000.

The funds generated from the sales of PL 480 Title IV food in COMIBOL commissaries would be utilized for the lay-off program. The generated funds will be less than the total \$4,000,000 required because: (a) the foods are sold at subsidized prices; and (b) the amount of PL 480 commodities is not firm as the requirement for foods is an estimate and the availability from U.S. surplus stocks is variable. Therefore, the difference between the local currency requirement and the availability of PL 480 Title IV currencies will be the responsibility of COMIBOL itself.

6. Technical and Administrative Reorganization Assistance

With the newly-created situation of labor discipline and non-interference in management and technical administration by the unions, COMIBOL finds it requires a complete administrative reorientation. To this effect it is planning the following for a minimum period of two years.

a) The engagement of twenty-four highly-qualified technical personnel to fill management and technical operation positions in its organization. The emergency assistance program for six mining engineers is included in this request. A.I.D. loan funds under this program would be limited to the payment of salaries of U.S. citizens employed.

b) Continuation of the Advisory Group for two years. The Advisory Group would phase out in the second year with the improvement in COMIBOL's own staffing. A.I.D. loan funds provided would be limited to the payment of costs covering members of the group who are U.S. citizens.

c) The following items are included in the Improvements to Staff Functions:

- 1) Organization of a Safety, Ventilation and Industrial Hygiene Department.
- 2) Organization of Warehouses and Inventory Control. This would be done by COMIBOL staff with the help of consultant services.
- 3) Organization of COMIBOL's accounting procedures. This would be carried out under supervision of the Advisory Group and is budgeted there. An allowance for equipment and materials to be procured in the U.S. is included.
- 4) A study of COMIBOL medical services including drug procurement and dispensing. Hospital administration and Clinic services. This would be done on a consultant basis.
- 5) Training of national personnel. It is planned to send a number of national engineers abroad for on-the-job training in mines, mills, etc. These could be in a position to replace the foreign technicians as the assistance program phased out.

The breakdown of funding for the Technical Administrative Reorganization Assistance Program follows:

(In thousands of U.S. dollars of equivalents)

Item	A.I.D. Portion			I.D.B. Portion		TOTAL
	Germany Portion US\$	Loan US\$ Costs	PL 480 Funds Local Costs	US\$ Costs	Local Costs	
Adm. & Tech. Assistance	467	339	200	594	-	1,600
Industrial Hygiene	-	120	80	-	-	200
Warehouses Control	-	-	-	40	-	40
Medical Study	-	-	-	12	-	12
Training	-	-	70	30	-	100
Advisory Group	117	117	-	115	41	390
Totals	584	576	350	791	41	2,342
	24.9%	24.6%	14.9%	33.8%	1.8%	
GRAND TOTAL ALL PROGRAMS	1,500	1,070	5,029	2,460	41	10,100
	14.8%	10.6%	49.8%	24.6%	0.4%	100%

C. ADMINISTRATIVE AND TECHNICAL ASSISTANCE

1. Advisory Group

The Advisory Group in the third phase shall consist of five professional people, experienced in the management of mining companies as well as a number of clerical assistants. The members of the Advisory Group are appointed by the Inter-American Development Bank with the concurrence of A.I.D. Originally, the main purpose of the Group was to supervise disbursement of funds; however, its functions have been enlarged to deal more effectively with the general problems of mismanagement that it has confronted. The President of the Advisory Group is a member without vote on COMIBOL's Board of Directors.

There seems to be no alternative to continuing supervision by the Advisory Group at least through the disbursement of the loan. Moreover, in the interest of clarifying the position of the Advisory Group with relation to COMIBOL, it is recommended the following articles be considered conditions of the loan.

The Advisory Group shall have the following functions:

- a)(i) To prepare plans or approve plans prepared by COMIBOL for the rehabilitation of COMIBOL's technical and administrative organization and for the investments to be made in COMIBOL's head office or mines.
- (ii) To advise the management of COMIBOL in all areas of its operation.
- (iii) To approve the program of procurement and to supervise the execution of all plans and procurement related to the third phase rehabilitation program.
- b) Finally, the expanded size of the Advisory Group will provide functional services for neglected areas such as metallurgy and finance accounting.

2. Administrative and Technical Assistance

The following personnel are proposed as an assistance team for COMIBOL:

4-6	Metallurgists
11-13	Mine Manager and Senior Mining Engineers
1	Mechanical Engineer
1	Electrical Engineer
1	Geologist
1	Comptroller + 2 Financial Assistants
1	Foundryman
<u>22-26</u>	<u>TOTAL</u>

It is anticipated that a team of qualified technicians would soon improve overall operations. Because of the recent favorable trends reported, the opportunities for further improvements are manifold. For example, an analysis and review of mining methods presently employed could result in certain changes which would materially reduce extraction costs. Similarly a review of milling plant operations could result in lower ore dressing costs. Procedures could readily be established to develop realistic estimates of the ore reserves for each of the 17 mines now operated by COMIBOL. In general, careful studies properly applied would provide beneficial controls for all phases of COMIBOL's operations.

COMIBOL itself has no effective means for recruiting foreign personnel. The use of the Advisory Group for recruiting should prove effective in obtaining highly qualified personnel.

The cost breakdown of the \$1,692,000 budgeted for administrative and technical assistance is attached as Annex III Exhibit E.

D. Technical Feasibility

Careful review of technical studies, materials and equipment requirements and other cost estimates shows that the requirements of Section 201 (b) (2) and 611 of the Foreign Assistance Act of 1961, as amended, have been met.

Summary of Capital Costs - Phase III
(in U.S. Dollars or Equivalents)

<u>Description</u>	<u>Foreign Costs</u>	<u>Local Costs</u>	<u>Total Costs</u>
1. Exploration Program			
Geological Consultant	1,370,000		
Vehicles	30,000		
Total			1,400,000
2. Mine Development Program			
a) Engineering Consultant	50,000		
b) Sinking of Shafts - Huanuni, Chocaya, San Jose, Caracoles, Santa Fe and Corocoro			
Equipment	190,522		
Spare parts & Materials	152,508		
Labor		143,670	
c) Tunneling 2000 meters			
Local contract		104,050	
d) Cross-cuts 6045 meters			
Spare parts & Materials	120,900		
Labor		181,350	
e) Diamond Drilling			
Spare parts and Materials	363,000		
Labor		211,200	
Total			1,517,200
3. Metallurgical Research	500,000		500,000
4. Mill Expansion Program Tasna, Telamaya, Santa Fe and Velarde Mills			
Equipment	243,870		
Spare parts & Equipment	58,050		
Labor		38,880	
Total			340,800

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Summary of Capital Costs - Phase III (Continued)
(in U.S. Dollars or Equivalents)

<u>Description</u>	<u>Foreign Costs</u>	<u>Local Costs</u>	<u>Total Costs</u>
5. Commissary and Lay-off		4,000,000	4,000,000
6. Technical and Administrative Assistance			
a) Technical Assistance	1,400,000*	200,000	1,600,000
b) Advisory Group	349,000	41,000	390,000
c) Improvement of Staff Functions			
1) Industrial Hygiene Material	80,000		
Industrial Hygiene Consultant	40,000		
Industrial Hygiene Labor		80,000	
2) Warehouse Control	40,000		
3) Medical Study	12,000		
4) Training	30,000	70,000	
Total			352,000
GRAND TOTALS	5,029,850	5,070,150	10,100,000
	49.8%	50.2%	

* Includes \$8000 for foreign procurement of accounting materials

III. Review of Second Phase Operations

One can hardly claim that the Second Phase operations of Operation: Triangular were an unqualified success. The single most difficult area covered the cost reduction program. In actual fact, cost per pound of tin rose during the period of the second phase. Actual cost figures are not accurate, because of the almost chaotic condition of the COMIBOL accounting records. The trend, however, was clearly upward.

The loan paper for the Second Phase projected a production cost of \$1.04 per pound of tin, assuming the so-called Pallacos project did not materialize, which it did not. At present, COMIBOL's production cost per pound (second half 1965) is \$1.34. [Both of these cost figures represent cost placed on the market, but excluding regalias (export taxes).] According to the best information now available to us, this is a realistic production cost level for the duration of the Third Phase, assuming a \$1.70 tin price, and the (conservative) production estimates for the next two years.

The \$1.04 and \$1.34 figures are not strictly comparable. First of all, the general rise in price levels in Bolivia between 1962 and 1965 must be taken into account. It is reasonable to impute about a 15% increase in COMIBOL's general operating costs in the period 1962-1965 resulting from factors over which it had no control. This estimate is supported in general by the 15% increase in the Bolivian price index between December 1962 and December 1965. More specifically in support of this assumption, the cost of meat purchased by COMIBOL has risen by 20 % in this same period; the cost of protective rain clothing for miners has gone up 50%; and prices of imported equipment, based on a limited sampling of recent purchases in the U. S. and Germany, have gone up by 8.5% in a period of little over a year.

It is also a fact that realization costs (transport, insurance, treatment charges) rise in proportion to the world price of tin. Between 1962 and late 1965, this cost component increased between 2 cents and 3 cents per pound. The original \$1.04 projection, therefore, when adjusted to December 1965 circumstances, becomes \$1.22. The difference between this figure and the \$1.34 cost with which we are presently working is adequately accounted for by excessive optimism in the Second Phase projection.

Of far greater significance as a justification for, and for the success of, the Third Phase is the change in the cost picture between the first and second semesters of 1965. An organization which, even with a world price of tin of \$1.68, was headed for bankruptcy in May 1965, has been transformed into one which is showing a profit, and has paid, for the first time in its history, export taxes to the central government treasury (\$200,000 paid in January of a projected payment of \$3 million in 1966). This has been achieved by reduction production costs of COMIBOL's own mined and milled tin ore by more than 10% from 1962 levels, and by 20% from the first half 1965 levels.

There is no doubt that the Second Phase cost reduction projections discussed above were excessively optimistic. Quite apart from continued labor indiscipline, continued management incompetence, and continued political interference in COMIBOL (as documented in the February 1965 Review Group report) which delayed and hamstrung efforts to cut costs, the projections in reference were based on unrealistic production goals and on excessive optimism with regard to improvement in tin recovery. For example, it was estimated that production would reach an annual rate of 19-20,000 tons by the end of 1964; whereas 1965 actual production was 16,500 tons. Also, several of the projects included in the Second Phase could not be carried out as originally planned, due to union resistance, lack of capable technical personnel, and failure of COMIBOL management to follow through aggressively on project implementation. This conclusion is reached, of course, with the benefit of hindsight; however, the experience gained in the Second Phase has led us to be more conservative in our production and technological improvement estimates for the Third Phase. There are, for example, some very encouraging new tin recovery techniques now at the pilot plant stage in COMIBOL, which, if successful, would bring a dramatic improvement in COMIBOL's financial situation. There is also reason to believe that production may be well in excess of 17,000 tons by 1968. Success in either or both of these areas would result in substantial cost reductions. Given past errors on the side of optimism with regard to COMIBOL, a conservative approach has been taken in the present loan request.

Second Phase cost estimates were based upon effective management control and a degree of labor discipline infinitely higher than that which actually occurred. Continued political instability in the country as a whole, precluded the level of executive support of the measures contemplated by the advisory group. Without such support management was unable to manage. It has only been since May of 1965, after the Second Phase had drawn to a close that the Government took the necessary strong measures to implement not only a cost reduction program, but as important, the return to COMIBOL management of over-all managerial controls. The importance of these measures was a major factor in the delay of over an entire year of favorable consideration of the Third Phase.

The housing program contemplated in the Second Phase was not realized as a result of a de-emphasis on housing as a priority item in the rehabilitation of COMIBOL during that time.

Two aspects of the Second Phase have been relatively successful, the lay-off program and accounting reforms. In the latter area, technical assistance has been rendered to the Central Office of COMIBOL by the accounting firm, Price, Waterhouse & Peat. In addition, the Arthur Young Company has completed year end audits of COMIBOL's operations. The financial advisor to the USAID has as a major responsibility the continued surveillance of COMIBOL's accounting systems. Accounting reform in the Central Office has been virtually completed; it is expected that during the Third Phase these reforms will extend to the mine sites.

The Second Phase loan paper projected the net lay-off of 3,040 workers. Data now available indicates that over 3000 workers were in fact laid off. See page 6 above.

The following table was compiled from data presented by COMIBOL.

Summary of Second Phase Loan Expenditures (excluding costs covering commissary supplies, lay-off excess workers, auditing and the Advisory Group).

(In thousands of U.S. dollars or equivalents)

<u>Description</u>	<u>A.I.D. Loan Funds</u>	<u>Germany Loan Funds</u>	<u>I.D.B. Loan Funds</u>	<u>TOTAL</u>
1. Exploration				
Technical Services	-	535	675	1,210
Equipment	-	5	38	43
Spares & Materials	-	44	155	199
2. Mines				
Equipment	25	41	194	260
Spares & Materials	418	779	577	1,744
3. Mills				
Equipment	55	171	645	871
Spares & Materials	994	2,195	1,760	4,949
4. Other Plants & Transportation				
Equipment	329	56	109	494
Spares & Materials	124	117	57	298
5. Metallurgy Research	-	41	76	117
TOTALS	1,945	3,984	4,286	10,215

NOTE: Items "Spares and Materials" include materials utilized in ore processing at the plants.

A total amount of \$11,478,000 was set up in A.I.D. Capital Assistance Paper under Details of Capital Costs - Phase II for the equivalent general rehabilitation items.

The exploration program was continued during the Second Phase under the retained supervision of Prospections, Ltd., a Canadian firm. Approximately 20 geologists were employed in the field and at the existing mines. The immediate results of this work are not yet fully measurable; however, the continuing process of developing geological data provides the mechanism by which ore reserves may be increased. One new high-grade silver ore vein was found in the Siete Suyos mine (Quechiclo District). At Malmisa, north of Potosi, the presence of a large virgin ore body is indicated and planning for its development is proposed in the third phase rehabilitation plan. Also proposed in the third phase is the mine development program based on utilization of geological data established by the exploration program. From all reports, the firm of Prospections, Ltd. is competent and qualified to carry out the project. Given adequate follow-up support by COMIBOL, the exploration program in the long run should afford good chances in finding new ore bodies thereby increasing both the tonnage and grade of COMIBOL reserves.

Preliminary laboratory research work on a flotation process for obtaining higher tin recovery from low grade tin ores has indicated overall promise. However, further laboratory research on this process is required before precise evaluations can be made. If additional evidence supports this project, it is proposed that a pilot plant be constructed to test, under operational conditions, the commercial feasibility of the process.

IV. ECONOMIC AND FINANCIAL ANALYSIS

1. Bolivian Mining Sector

Given Bolivian dependence on mineral exports for more than 90% of its foreign exchange earnings, a healthy and flourishing mining sector is vital to the country's economic well-being, and continuing economic growth. Since COMIBOL accounts for nearly 55% of the mining sector's foreign exchange earnings, its efficient operation is the single most important element in this sector's contribution to the national economy.

The goals of the mining sector are (a) to seek a rapid expansion of the private sector share in the total mineral production of the country and (b) to help make effective the COMIBOL reform program initiated in May 1965 by the Bolivian government.

In the private sector, realization of these goals is being achieved with the assistance of an A.I.D. \$5 million loan to recapitalize the reorganized Mining Bank; the promulgation of a new mining code; issuance of a new Investment Law which includes incentives to mining investment; and a downward revision of regolios (mineral export tax) rates.

At the same time, and having a direct relation to COMIBOL's rehabilitation, a program of mining access roads, intended primarily to open up to economic exploitation highly mineralized areas under private ownership, is being undertaken. It is anticipated that this road construction program will permit the temporary absorption of up to 2,000 ex-COMIBOL miners (350 are already employed). As the access roads are completed it is anticipated that the bulk of these ex-miners can be given employment in the new and expanded private mines resulting from this road program. COMIBOL layoffs in the Third Phase will be so timed as to insure, to the extent possible, that realistic employment alternatives are available to those laid off. Although of less importance in absorbing excess miners, the colonization program will be continued. This program offers the ex-COMIBOL miners at least an opportunity for a new life in the rich lowlands of Bolivia.

2. The World Tin Market

The world price for tin has gone up sharply in the last 18 months, having risen from \$1.14 average per pound in 1963 to \$1.55 average in 1964. During the first 6 months of this year, the price has averaged \$1.68, and has remained over \$1.73 since March. The price for the year 1965 average is \$1.74. The outlook for the foreseeable future is for continuing high price levels, with none of the world's major tin producing countries capable of significant output expansion in the face of gradually increasing world demand. Although progress is being made in the U. S. market toward the development of tin substitutes, any consumption decline in the next five years resulting from substitutes should be more than offset by the exhaustion of the U.S. stockpile surplus.

3. COMIBOL's Economic and Financial Position

COMIBOL's accounting loss, which totalled almost \$17 million in 1963, declined sharply to an estimated \$4.5 million loss in 1964. Since a large part of this figure consists of regolios (export taxes) to the government, which COMIBOL has not actually paid for many years, COMIBOL finished calendar year 1964 with a cash surplus, without having had to do any net borrowing for working capital purposes. This financial improvement was almost entirely due to the rise in world tin prices, since COMIBOL's costs per pound of tin produced increased in 1964, and continued to rise in the first five months of 1965.

COMIBOL cost per pound of tin, at market, but exclusive of export taxes, averaged \$1.39 in 1964. In the fourth quarter of 1964, the per pound cost reached \$1.48, and during the first half of 1965 it rose to \$1.49. Operating losses for the first five months of 1965 totalled \$3.7 million. Had this cost level continued COMIBOL's solvency would have been further impaired.

The drastic reforms decreed by the Bolivian Government in May, however, dramatically reversed this trend. The production cost dropped from an average \$1.49 per pound of tin for the first half of 1965 to \$1.25 in July, and \$1.34 in August. The August cost increase is accounted for by a production decline caused principally by the three-day national holidays. The cost reduction has been maintained throughout the remainder of 1965, averaging \$1.33 in the second half of the year.

This cost reduction has been achieved by such measures as dismissal of workers caught stealing ore; adoption of theft control systems in Huanuni and San Jose, two of the major sources of stealing; free movement of machinery and equipment within mines and between mines; increasing the number of shifts worked in mines and mills where needed; abolition of unauthorized assemblies on company time; gradual phasing out of uneconomic working areas; and dismissal (accompanied in many cases by deportation) of extremist mine union leaders and agitators.

These measures are in addition to the fundamental one taken of establishing uniform base pay system in all mines and abolishing all special bonuses. The practical result of this change was to reduce take-home pay of most miners employed in the three principal money-losing mines, many of whom had been earning up to \$20-30 per day due to ill-conceived incentive schemes. The previous bonus system was replaced by a profit-sharing arrangement, according to which 25 percent of the profits of individual mines is divided among the mine's employees in proportion to their base pay on a quarterly basis; and an additional 25 percent of the corporation's over-all profits is divided among all employees, on an annual basis. Under the new system, miners in some of the mines in the Quechiela area are now earning more take-home pay than under the previous system, based on the mines' profits.

Tin production in 1964 was reported as 17,700 metric tons, a 15% increase over 1963. 1965 production totaled 16,460 tons. This decreased production level is in part the consequence of sporadic work stoppages arising out of COMIBOL's enforcement of the May 1965 decess and in part the result of a gradual closing down of unecnomic, high-cost mining stopes. It also represents the attempt by COMIBOL to exclude from its production figures the purchase, from its own employees, of often stolen minerals, a practice which in the past has proven unprofitable and has resulted in misleading production figures.

In spite of lower production, revenue from the sale of minerals rose from \$57 million in 1964 to \$62.7 million in 1965. A comparison of profits before export taxes, and profit sharing, shows an impressive upward trend for the past three years (Annex IV, Exhibits A and B). The net loss (before profit sharing) of \$17 million in 1963 and of \$4.7 million in 1964 was followed by a profit of \$120,000 in 1965. Since Supreme Decree No. 07474 of January 12, 1966,

contains provisions for the capitalization of 1965 export taxes amounting to \$10.1 million, COMIBOL may be considered to have made an operating profit of \$10.2 million in 1965. Its cash position therefore obviously improved in 1965. In 1966 COMIBOL should be in a position to pay nearly \$3.0 million in export taxes, in fact, \$300,000 has already been paid in January, 1966.

With a continuing enforcement of the reorganization decrees, it is anticipated that COMIBOL will have no difficulty in handling the additional debt-servicing burden imposed by a third phase loan package. This conclusion is derived from the five-year projected cash flow figures found in Annex IV. The revenue figure is based on the assumption of a constant 17,000 ton yearly tin production at an average price of \$1.70, which is below the January 1966 price of \$1.79.

The proposed loan package of \$10.1 million is intended to provide resources to deal effectively with the three major problem areas having a direct relationship with future profitability. These are: qualify of management; increase of ore reserves and metallurgical recovery; and gradual reduction of excess labor. Since, for the reasons indicated in this paper, there is evidence for optimism in each of these areas, a constant revenue projection may be regarded as a conservative estimate of future COMIBOL performance.

Each additional metric ton of fine tin produced by COMIBOL will yield approximately \$3,000 in profit. At present only about 50% of the tin in the ore is recovered; the other 50% is lost in the tailings from the mills. With modern technology in other metals, recoveries of 85% to 90% are common. While the situations are not strictly analogous, they do demonstrate the enormous potentialities given a breakthrough in research and serve to illustrate one area in which a dramatic advancement could be achieved.

The Bolivian Government has committed itself to, and has taken concrete steps to assure the continuation of the necessary reforms in labor discipline and labor/management relations. The success of these measures is now clearly visible, and the expectation is for continuing and hopefully increasing COMIBOL profitability.

4. Objectives of the Third Phase

The basic objective of the Third Phase Operation is to assure that COMIBOL will continue to operate on an economically viable basis. A measurement of this objective can well be the payment to the Central Government of its profits (in the form of export taxes) for further investments in the economic and social development of the country.

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It has long been our goal in Bolivia to transform COMIBOL from being a drain on the country's resources, into a contributor to its economic needs through payment of regalias (export taxes). We have deemed this of special importance given our gradual (and in 1966, total) withdrawal from the field of direct budget support. Regalia payments serve the purposes, both of providing the central government with additional resources, and of contributing towards the important objective of central government control over the financial operations of semi-autonomous government agencies. Thus, even in a period in which COMIBOL has begun to show profits, it is in our legitimate interests to carry through with a Third Phase lending program (which, however, by the fact of its lower level than that of the Second Phase, takes account of COMIBOL's improved financial situation). In the absence of Third Phase financing, COMIBOL would be unable to make regalia payments at the same time as financing its legitimate development requirements. Thus, either COMIBOL's operations would be adversely affected, or the government would have greater difficulty in financing its own growing obligations.

In addition, COMIBOL has only in the last year managed to free itself largely from political interferences and introduce rational management practices, a goal toward the accomplishment of which the three Triangular partners have already invested nearly \$50 million. With the achievement so recent, and still so subject to attack by vocal and powerful elements of Bolivian society (labor unions, leftist political parties, student groups), its consolidation requires continuing and firm support. Our participation in the Third Phase brings together not only the financial resources, but also the moral influence of the IDB and the German government with our own to keep COMIBOL as free as possible in the future from the pernicious influences which have impaired its economic effectiveness in the past. Quite apart from the real politico-economic advantages of having COMIBOL contribute to the treasury, our continued lending participation through the Third Phase will give us influence which we would not otherwise have. Without it, the possibility of erosion of the substantial gains made in the last year would be much greater than otherwise.

As a specific example, the USAID will begin, in the second quarter of this year a program of management and industrial relations seminars in COMIBOL (sponsored by the AID-financed Bolivian Productivity Center) which will begin with top management and appropriate key government officials, proceed through the mine manager and supervisor level, and terminate in the development of a continuing internal training program. This is the kind of activity which is vital to COMIBOL's long-range management health. It is also, however, something the need for which neither COMIBOL itself nor the government yet fully appreciates. Our continued lending will permit its implementation as well as permit us to assist COMIBOL in its efforts to resist unwarranted outside incursions into its operations.

5. Performance Criteria for the Third Phase

The fixing of specific cost-reduction criteria as performance targets is inadvisable in the light of our past experience. Cost variations in the past have been largely a function of labor indiscipline and management lack of authority. In the series of decrees passed by the government since May 1965, concrete steps were taken to strengthen management authority and to define labor's legitimate role in the corporation. It is departures from the measures outlined in the decrees which will adversely affect the performance as foreseen in the Third Phase loan paper. We and the other participants in the COMIBOL rehabilitation program have for the first time, in the Tripartite document signed in Washington in October 1965, an effective mutual instrument to cope with deteriorations in COMIBOL's operations. The Advisory Group, the German Embassy in La Paz, the I.D.B. resident representative, and the Embassy/USAID in La Paz, provide a group of well-informed and capable people to whom any such deterioration will be quickly evident. An adverse change in present production costs, production levels, management authority, or unwarranted government intervention would be the basis for invoking the consultations provided for in the Tripartite document. Significant adverse changes in the cash-flow data contained herein will also provide us with an indicator as to whether we are succeeding or failing in our efforts to make of COMIBOL a viable economic entity. Our past failures with COMIBOL have been not so much the result of lack of adequate performance measures, as of a lack of coordination and cooperation by the three financing partners. This situation no longer prevails in La Paz. The U. S. Country Team, the Advisory Group, the IDB Representative and the German Embassy have maintained, for the past 18 months, close and continuing liaison; and there is no reason why this cooperation should not continue.

V. EFFECT ON THE UNITED STATES ECONOMY

A. As tin is not mined in the United States, the Rehabilitation Plan will result in no adverse effects upon the U.S. economy. On the contrary, the U.S. tin market relies on Bolivian production as one of its sources of imports.

B. Development loan funds will be used exclusively for procurement of goods and services of U.S. sources and origin.

VI. SPECIAL TERMS AND CONDITIONS

(a) The resources of the loan shall be utilized in their entirety by the debtor in accordance with the plan for rehabilitation of the nationalized mines established by Decree No. 5866 of August 31, 1961, Decree No. 01788 of May 23, 1965, and Decree No. 07474 of January 12, 1966. If substantial modifications in the legal provisions or the basic regulations concerning the debtor are approved which, in the opinion of AID may adversely affect the execution of the plan, AID may take measures to halt further disbursement of the loan.

(b) The signature of the loan contract shall be contingent upon receipt of a written commitment by the Government of Bolivia that the suspension of royalty payments will be continued for any period during the Plan for Rehabilitation during which the Advisory Group determines that such payment would adversely affect (i) the financial position of the debtor to carry out the plan; and/or (ii) the debtor's capacity to service its obligations to the financing agencies of the plan.

(c) Before the first disbursement the debtor shall demonstrate to the satisfaction of AID that it: (i) is up to date in compliance with all its obligations to AID and the other members of the Triangular Operation, and (ii) has sufficient resources to fulfill its obligations falling due in the next 12 months.

(d) The contract shall contain such provisions as AID deems appropriate to assure that: (i) the Advisory Group to COMIBOL shall continue to function effectively during such periods as AID may reasonably specify; (ii) the loan resources shall be utilized in accordance with a schedule of investment; (iii) the debtor, in consultation with the Advisory Group, adjusts its personnel to its operating requirements and rationalizes its system of direct and indirect remuneration in accordance with the Plan, giving due regard to labor productivity; (iv) the debtor presents to the Advisory Group for its prior approval the projects of bidding or inquiry with respect to contracts for construction, for personal services and for purchasing goods as well as the respective contracts; (v) the debtor shall effectively apply the general labor law, and specifically Supreme Decree No. 07188 of May 23, 1965, without prejudice to the appropriate modifications of said law for the purpose of cost reduction.

(e) AID, acting alone or in concert with the Advisory Group, shall establish such control procedures as it deems necessary to assure the satisfactory execution of the projects financed with the resources of the loan, and the debtor and the guarantor shall extend all cooperation which is required for the most effective accomplishment of this purpose.

VII. SUPPLEMENTARY PROTOCOL 1965

On October 7, 1965, the Representatives of the Governments of Germany and the United States and of the Inter-American Development Bank met to discuss the advisability of initiating the third and final phase of the COMIBOL rehabilitation program which would provide \$10.0 million in external financing. In the course of these discussions the results of the Triangular Operations were analyzed; and the three parties concluded that the technical, administrative, and financial progress made by COMIBOL, as well as the planning for further improvement of the Corporation's activities were such as to justify the adoption of the third phase.

In case of serious developments, such as persistent losses, that threaten to endanger the continued economic viability of COMIBOL, it was agreed that the Inter-American Development Bank, as financial agent for the Triangular Operation, would notify the partners so that consultations regarding such a development could take place at the earliest possible moment.

For its part, the Government of Bolivia and the management of COMIBOL are expected to continue to take all measures to assure the sound economic operation of COMIBOL.

SUPPLEMENTARY PROTOCOL TO THE MEMORANDUM OF UNDERSTANDING OF JUNE 9, 1961
AND THE SUPPLEMENTARY UNDERSTANDING OF JUNE 10, 1961

In accordance with the Memorandum of Understanding of June 9, 1961, as amended on March 14, 1963, which laid the basis for the Triangular Operation for the rehabilitation of COMIBOL, representatives of the Government of Germany, the Government of the United States of America, and the Inter-American Development Bank met in Washington from October 7 to October 11, 1965, to review the results of the Triangular Operation and discuss the request of COMIBOL for financing the third and final stage of this rehabilitation program.

The action taken by the Government of Bolivia and the management of COMIBOL during recent months, which has resulted in putting the enterprise on an economically viable basis, is the basic precondition for further and final financial assistance by the partners. As a result of the discussions, the partners have concluded that the technical, administrative and financial progress made by COMIBOL, as well as the planning for further improvement of the corporation's activities, are such that external financing of a significant portion of the third and final phase of the rehabilitation of COMIBOL is justified.

1. The Government of Germany makes available, in accordance with its arrangements with the IDB and subject to the terms of the contracts to be concluded between the IDB, the Kreditanstalt fur Wiederaufbau, and COMIBOL, an amount of up to DM 6 million.
2. The Government of the United States through the Agency for International Development agrees to consider financing an amount of up to the equivalent of US\$6.1 million. It is anticipated that such total shall include a dollar loan of up to US\$1.1 million, surplus agricultural commodities to be made available up to the equivalent of US\$4.0 million, subject to the requirements of U. S. Public Law 480, Title IV, and up to the equivalent of US\$1.0 million, in Bolivian currency resulting from the sale of Title I, P. L. 480 commodities in Bolivia.

3. The administration of the IDB will submit for the consideration of the Board of Executive Directors in accordance with the usual procedures of the Bank the recommendation for the IDB to make a loan of up to US\$2.5 million.
4. The participation in the third and final phase of the Triangular Operation agree that the Advisory Group to COMIBOL shall be continued for the duration of that phase. The Advisory Group will continue to have the functions spelled out in paragraph 11 of the Memorandum of Understanding of June 9, 1961, with the additional understanding that they will continue their detailed review in order to verify that COMIBOL carries out all of its operations as programmed.

In addition, the close coordination between the parties will be facilitated through periodic consultations between representatives of the IDB, the United States Embassy, and the German Embassy, resident in La Paz.

Finally, it is agreed that, when deemed appropriate by the parties, a high-level technical group, chosen by them, will make an independent appraisal of the technical, administrative, economic and financial aspects of COMIBOL's operations.

5. The improvement in the world tin price and the energetic reforms introduced into COMIBOL's operations by the Government of Bolivia and COMIBOL's management during recent months, have produced a situation in which the enterprise has demonstrated that it can begin to operate on an economically viable basis. The additional external support, which the partners of the Triangular Operation are now prepared to consider, is based on the assumption that COMIBOL will continue to operate profitably and that the economic viability of the organization can be continually strengthened. In case of serious developments, such as persistent losses, that threaten to endanger the continued economic viability of COMIBOL, it is agreed that the Inter-American Development Bank, as financial agent for the Triangular Operation, will notify the partners so that consultations regarding such a development can take place at the earliest possible moment. Pending the results of such consultations, it is understood that no substantial new commitments from third phase funds shall be effected.

6. It is agreed that the Government of Bolivia and the management of COMIBOL will be expected to continue to improve the technical, economic, financial and administrative aspects of COMIBOL's operations. Special emphasis will have to be given to improving financial management controls, including the necessary overhaul of the accounting system. At the same time, management must be strengthened, particularly at the mine level, and the Government of Bolivia will be expected to continue to take the necessary actions to regularize labor/management relations. The objective will continue to be the ability of management to make basic decisions in accordance with technical requirements and economic and financial realities.

This memorandum shall apply to the Land of Berlin provided that the Government of the Federal Republic of Germany has not made a contrary declaration to the two partners within three months from the date of signatures hereto.

IN WITNESS WHEREOF, the parties hereto have signed this document in Washington, District of Columbia, United States of America, this eleventh day of the month of October, nineteen hundred and sixty five.

FOR THE GOVERNMENT OF THE FEDERAL
REPUBLIC OF GERMANY

FOR THE AGENCY FOR INTERNATIONAL
DEVELOPMENT

(signed) Norbert Berger

(signed) Philip Glaessner

FOR THE INTER-AMERICAN DEVELOPMENT BANK

(signed) Ewaldo Correia-Lima
Operations Manager

October 20, 1965

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ANNEX I
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Bolivia's External Debt and Repayment Capacity

Summary

It is obviously important that AID and other lending institutions consider the present debt of Bolivia and the country's probable future capacity to service its debt before deciding on the amount of further credits that will be made available and the loan terms that would be most prudent.

The main relevant facts of the Bolivian debt situation are as follows:

1. Bolivia had an outstanding external public debt as of the end of 1964 of \$224.5 million.
2. During 1963 and 1964 the central government paid only \$1.8 million and \$0.7 million, respectively, on its external debt. COMIBOL, however, made large net retirements of its short-term debt to the smelters and now is virtually free of that type of obligation.
3. The present structure of this debt is such that the heavy burden of amortization and interest payments falls in the next few years. From the present through 1969 these charges amount to from \$12 million to \$15 million. Thereafter these service costs ^{1/} on the present debt decline to approximately \$6 million in 1975.
4. Bolivia has the possibility of a rapid growth of exports. On an optimistic but by no means totally unrealistic projection, exports in 1975 could be more than double the 1965 level.
5. If Bolivia is to achieve and sustain a rate of growth of income of from 5% to 6% per year, it will require substantial external assistance beyond that already received. In other words, the external public debt will in all **likelihood increase considerably** above the 1964 level.

Conclusions based on the foregoing empirical propositions:

1. As far as the basic resource situation of Bolivia is

^{1/} In the present context "service" costs or changes will refer to both interest and amortization.

concerned, there is no ineluctable reason why it cannot absorb and put - to fruitful use further large inflows of foreign capital. And if it does put such external assistance to productive uses, there is no insurmountable barrier to servicing that debt, provided always that the maturity structure of the debt is not completely inappropriate. This proposition rests on the fact that the country has enormous unutilized natural resources and a considerable amount of unemployed labor, hence the possibility of sharply diminishing returns to capital inputs, whether of domestic or foreign origin, is quite remote. To put the matter another way, it is economically feasible by increasing the rate of capital formation with external assistance to maintain a 5% to 6% average rate of increase in annual output and, out of this increase, to transfer considerable sums abroad.

2. Additional lending to Bolivia by AID and other assistance donors should be on soft terms. Minimum AID requirements with respect to interest rate, grace period and total loan period should be imposed so as not to further accentuate the already unfavorable structure of the debt and so as to maximize the net external economic assistance to Bolivian development to be received from a given flow of loans. This does not exclude, of course, the possibility of two step loan arrangements with softer terms for dollar repayment than for local currency repayment.

3. High priority should be given in Bolivian economic planning and by lending agencies to projects that increase export potential or provide import substitution. This is not to say that all projects can or should have a high direct rating by these criteria. Many infrastructure investments, for example, that have few direct foreign exchar benefits, will be necessary. The investment mix should, however, reflect this concern with future debt service problems.

4. Bolivia should make the necessary legal and institutional changes to encourage exports; for example, it may be desirable to join LAFTA, export customs procedures can be much simplified, the proposed new Investment Law can be enacted, and the new Mining Code can be implemented in such a way as to give maximum encouragement to private mining.

Present External Public Debt 2/

- The following table shows the external public debt as calculated by the Central Bank. It does not include interest arrears. Only sums actually drawn against loans are included, thus the AID loan for highways 1 and 4 is excluded.

EXTERNAL PUBLIC SECTOR DEBT, DEC. 31, 1964

(in million \$US)

Old Bonded Debt	56.3
Export-Import Bank	33.9
British, French and German Moratoria	6.7
Argentine-Bolivian Convention	49.5
Brazilian-Bolivian Convention	11.8
USAID	11.3
IDB	9.5
Bermejo Sugar Mill Loan (Japanese)	1.8
YPFB Debt	13.1
COMIBOL Debt	28.0
Others	<u>2.6</u>
T O T A L	224.5

Source: Central Bank Estimates.

Of this \$ 224.5 million of debt, loans amounting to at least \$ 90 million, or 40% of the total, are in default. The old Bonded Debt and the Export-Import Bank loan are the major loans in this category.

2/ The IMF has near completion a more detailed estimation of the debt. More accurate figures will be available from this study. It is not likely, however, that great changes will be made in the total.

Projected Additional Debt

Besides the existing debt Bolivia will incur additional obligations amounting to \$ 47.4 million as it draws on loans presently authorized. The largest of these is the \$ 33 million AID loan for highways 1 and 4. Thus, with no new lending, the total principal debt owed will amount to \$ 271.9 million.

Since Bolivia, one of the least developed countries of Latin America, is not likely to achieve domestic savings rates high enough to finance an acceptable rate of growth before 1975, it must be assumed that it will continue to rely on external assistance for at least the next 10 years. Some of this assistance may and should come in the form of private equity investment, and some grant assistance will continue to be forthcoming. These sources are not likely to be sufficient to cover the gap between internal resources and the necessary total for growth. Loan funds from AID, IDB and other lending agencies will be necessary. Hence the Bolivian debt may be expected to increase still further.

Present data with respect to actual savings, investment, and income rates are so suspect that it is scarcely worthwhile to make highly technical projections of Bolivia's external assistance needs over the next five to ten years. In addition such projections would have to depend on guesses as to incremental capital-output ratios. Nonetheless even the most tentative forecast would indicate that the external debt of Bolivia will be more than double the present level the next ten years. This assertion is based on the following assumptions:

- An average growth rate of not less than 5% per year is to be maintained.
- In order to maintain this growth rate the level of gross investment must be not less than 15% of the GNP and probably nearer to 18%.
- The present rate of domestic savings is 10% or less (this assumption is based on very scanty evidence). It will rise progressively reaching 18% of GNP in 1975.
- Additional lending will be on soft terms; that is, with relatively long grace periods, low interest rate and long pay-out periods. If this condition is violated the total flow of lending will have to be substantially larger to achieve the same result. 3/

3/ See A Study on Loan Terms, Debt Burden and Development, AID, April, 1965

Debt Service Schedule

It is only possible to estimate in very rough terms a year by year schedule of amortization and interest charges that will face Bolivia. The reason for this is that more than 40% of the total present debt is in default and future interest and principal schedules will depend on the outcome of negotiations of the GOB with the bondholders committee ^{4/} and with the Export-Import Bank. In addition, the exact terms or repayment of Bolivia's debt to Argentina for highway and rail construction have not as yet been finally established. Thus, over half of Bolivia's external debt is in an unsettled state as to repayment timing.

A rough estimation is given below of the debt service charges in selected years. The criterion used was not contractual liability in all cases, but an estimate of amount that the GOB might attempt to pay and which would not be completely unacceptable to creditors. Thus the amounts for the Export-Import Bank are no more than guesses on that basis.

ESTIMATION OF PUBLIC SECTOR DEBT SERVICE, SELECTED YEARS
(in millions of \$US)

<u>Existing Debt 12/31/64</u>	<u>1966</u>	<u>1969</u>	<u>1975</u>
Old Bonds	1.0	1.0	1.0
Moratoria	1.1	1.4	0.1
Exim Bank	3.0	4.0	2.0
Argentine Debt	1.0	2.0	0.5
USAID	1.1	2.3	0.7
Japan	0.3	0.3	0.2
YPFB	1.0	1.0	1.0
COMIBOL (Net of payments to USAID)	<u>2.6</u>	<u>2.5</u>	<u>0.1</u>
	11.1	14.5	5.6
Estimated on \$250 new debt by end of 1975	<u>1.0</u>	<u>1.7</u>	<u>11.5</u>
T o t a l	12.1	16.2	17.1

^{4/} The Committee negotiating the terms of repayment of bonded debt incurred in the 1920's.

The servicing on new debt represents an additional borrowing of \$ 250 million from 1964 to 1975 ^{5/}. An additional \$ 250 million of debt incurred over the next ten years will affect the debt service picture in greatly differing ways depending on the average loan terms. For a crude estimate arbitrarily assumed, 3.5% interest, 7 year grace period, 1% interest during the grace period and 30 year total loan - that is to say something between AID's softest terms and typical IDB terms. Assumed also that during the ten year period the level of borrowing will be \$ 40 million per year in 1965 descending to zero in 1975 by step decrements.

In sum, Bolivia should be paying an amount rising from \$ 12 million to \$ 16 million per year on external debt in the 1960's; if it did little or no additional borrowing this would taper off rapidly in the 1970's. If it is able to borrow in the 60's on soft terms the neighborhood of \$ 250 million more, debt service will be at the \$ 17 million to \$ 19 million level in the last half of the decade of the 70's.

It must be emphasized again that these are extremely crude estimates depending on arbitrary assumptions about the amortization schedules for the present debt and amounts and terms of new borrowings. Particularly important for the 1960's is the assumed grace period. If substantial loans are received from non-AID sources, and hence on less favorable repayment terms, the next few years will see an even greater bulge in Bolivia's debt service burden, especially if these same loans have a short total payout period.

Debt Service Capacity

There are three distinct but related problems where external public debt service difficulties may be encountered. These are: 1) the income-savings problem, 2) the fiscal problem and 3) the transfer or balance of payments problem. To consider those in turn:

1) Income-Savings. The question here is whether the external resources provided will be applied to productive uses so that a rising out-put results and whether Bolivia can or will abstain from using all of these output increases for consumption purposes. If we assume that external resources of the magnitude mentioned above are

5/ Last year's GDP led figures of \$100 million and \$150 million of new debt up to 1970. On the basis of a new analysis of probably growth in Bolivia's GDP and changes in its rate of domestic saving the \$150 million figure is much too low and termination of net external investment before 1975 seems unlikely. The \$250 million figure of the text is conservative. In addition to this increase in public sector debt there should also be equity investment by private source notably in the mining and petroleum industries.

used productively, a conservative estimate of the rate of growth of output would be 4% per year. At this rate of growth the external debt service as fraction of GNP would be 1966, 1.56%; 1969, 1.86%, 1975, 1.4%. If a 5% growth rate is achieved, i.e., more or less the minimum goal, the ratios become 1966, 1.53%; 1969, 1.77%; 1975, 1.34%.

Even taking the more conservative income estimates, these do not on the face of it appear to represent difficult saving rates. Thus the income-saving problem does not appear serious unless the assumptions of the AID program are in error, i.e., that external assistance can achieve economic growth in Bolivia.

2) Fiscal. The external debt of Bolivia is virtually all in the public sector. If large transfers are made in the private sector it will be because the American owned Bolivian Gulf Oil Co. has large oil shipments and therefore large dollar earnings. Hence for present purposes we can confine our attention to the problem area, the public sector.

Ability of the public sector to repay, implies another problem besides the overall savings level; it implies that the Central Government will be able to tax from the public more than it spends in current operations plus capital formation and/or that the state enterprises as a whole will earn a level of profits greater than their collective capital expenditures. The only alternative open to the Government to gain control of savings is via Central Bank credit expansion. As to whether in the long-run the Government can achieve the necessary fiscal control depends largely on whether present efforts, strongly supported by USAID, to rationalize public sector finances are successful and whether, in the near future, a serious effort is made to reform the chaotic and inadequate tax structure. All that can be stated now is that the problem is a manageable one if the GOB is willing to take the necessary steps. The greatest difficulties will be encountered in the next two to four years when the debt burden will be at its largest relative to the total revenues of the public sector.

3) Balance of Payments. It is on this aspect of the external debt service problem that attention is usually focused, although in a sense the income-saving problem is more fundamental. Essentially Bolivia's debt service-balance of payments problem consists of allocating a sufficient portion of the increase in output capacity consequent on investment to the export-producing and import-replacing industries in order to avoid future balance of payments crisis. Naturally, the more externally-financed investment it has the more it can allocate to these industries. Thus, the ability to service debt is not independent of the amount of debt incurred.

Basically, Bolivia's export future is quite favorable. With well-directed investments and relatively easy changes in the institu-

tional framework it can probably increase very sharply its minerals exports - barring an unlikely drastic fall in the prices of minerals, especially tin, in the next decade. In the non-minerals field, its long-run prospects are equally good or better. With investment in its agricultural resources, in transportation, and in industries using its natural resources, it could greatly increase, for example, its exports of tropical fruits, wood products, wool, meat, petroleum products and their derivatives. It can also produce substitutes for many of its present agricultural imports. The following projection of exports is optimistic but by no means unreasonable:

ESTIMATED FUTURE EXPORTS 1965-1975

(million \$US)

	<u>M I N I N G</u>			<u>P E T R O L E U M</u>			<u>M I N E R A L</u>		<u>TOTAL</u>
	<u>COMIBOL</u> ^{a/}	<u>MINING</u> <u>SECTOR</u> ^{b/}	<u>TOTAL</u>	<u>YPFB</u> ^{c/}	<u>PRIVATE</u> ^{d/}	<u>OTHER</u> <u>EXPORTS</u> ^{d/}	<u>CIF</u> <u>TOTAL</u>	<u>COMM</u> <u>COSTS</u> ^{e/}	
1965'	66.5	62.6	129.1	1.1	0.9	6.4	137.5	28.4	109.1
1966	66.8	64.4	131.2	1.2	26.1	7.7	166.2	28.9	137.3
1967	66.2	69.0	135.2	1.2	35.3	9.2	180.9	29.7	151.2
1968	66.2	77.4	143.6	1.3	45.3	11.0	201.2	31.6	169.6
1969	66.2	87.1	153.3	1.4	45.3	13.2	213.2	33.7	179.5
1970	66.2	98.1	164.3	1.5	45.3	15.8	226.9	36.1	190.8
1971									198.4
1972									206.3
1973									214.6
1974									223.2
1975									232.1

a/ 1965 value of production and 1966-1967 output levels based on COMIBOL budget estimates. Prices for 1966 \$1.60 and 1967 \$1.50 per pound of tin.

b/ 15% rate of increase in tin production is estimated for 1965 to 1970 (assuming that in 6 years production of tin will be a little more than doubled). Tin prices: for 1965 \$1.80; 1966 \$1.60 and 1967-75 \$1.50. Proceeds of other private minerals are assumed to increase by 5% p/y

c/ Petroleum production was estimated by YPFB for both state and private production. Exports of private crude oil through the pipeline are expected to begin in November 1965 according to Gulf's information.

d/ Among others are included mainly fruits, coffee and meat. Passed on USAID agricultural marketing technicians's analysis.

e/ Reduced 22% of total mining exports. This reduction constitutes commercialization costs which it is necessary to subtract in order to arrive at net figures for mineral exports.

f/ From 1971 on there is estimated a 4% increase per year for total FOB exports

These export levels would give debt service - export ratios as follows:

1966	8.8%
1969	9.1%
1975	7.5%

A number of points should be made on the projection and resulting ratios:

- COMIBOL is not counted on heavily; the 1965 figure is 18% above COMIBOL's 1964 exports but is entirely reasonable given the present rise in prices. If substantial production increases are forthcoming the COMIBOL estimates could be low.

- The private mining projection appears optimistic, but in fact is quite conservative. With the increased lending capacity of the Mining Bank, the new Mining Code, and AID/GOB investment in mine area roads, it can be achieved.

- The private petroleum exports figures are also large. Gulf Oil Co, is, however, in the process of investing \$25 million in a pipeline for the export of its crude. Presumably it has good reason to think it can produce the crude. It should be noted, however, that increases in Gulf's exports carry with them the necessity to transfer profits abroad. The YPFB figure does not take into account the very real possibility that it can export natural and/or petrochemicals to Argentina at a value of from \$5 to \$10 million per year.

- From the perspective of foreign trade, the burden of the Bolivian public foreign debt is not extremely onerous. Moreover, Bolivian private foreign debt is very low, estimated at \$17 million in 1964.

A rough balance of payments projection for 1969 (for 1966, 1967 see C-4 table) shows that Bolivia could sustain the estimated debt service payments of \$16 million for that year given the following:

- Exports increase as indicated in the table to \$178.7 million.

- Imports increase by approximately 8% per year with the negative service balance increasing proportionately. If this condition is not met, i.e., if imports of goods and services increase at an average rate of, say, 10% per year, Bolivia would have a deficit of roughly \$9 million in 1969.

-Loans and grants on private and official account reach \$ 25 million. This is a relatively modest level. Should it be exceeded there is of course, more flexibility in other items.

In the 1970's, if loans and grants are progressively declining and reach zero in 1975, the rate at which exports must increase to cover a given debt service level depends on the rate of growth of imports of goods and services. This can be seen in the following figures for the year 1975, where various rates of growth of imports are shown with the related required rate of growth of exports, taking the 1970 export projection shown above as a base:

Rate of growth of Imports of goods and services	3%	5%	8%
Required rate of growth of exports, 1970-1975	4.8%	7.3%	11.3%

As can be seen, if import growth is held to the 5% per year average or below, the required rate growth of exports is not excessively high if attention is given to the problem in the investment program. Import growth rates of 5% or lower will also require that attention be given to commercial policy and conceivably to the exchange rate in order to avoid excessive consumer goods imports as income rise.

Table C-3 - Notes

1. Sources of the Data:

1963 - Final Accounts, Ministry of Finance
1964 - Actual Transactions (not final)
1965 - Revised Budget Estimates, Ministry of Finance
1966/67 - Projections. See notes 5 and 6 below.

2. Lines A.1 and B.2-B.6 exclude revenues (and expenditures in an equal amount) of the Social Security Agency (CNSS). The budget of the agency was \$b. 122.2 million in 1964 and is projected at \$b. 134.0 million for 1965.

3. Line D.3 for 1965 is in accordance with Ministry of Finance projections. We have assumed that this \$b. 30 million increase in each balance occurs as a result of deferring liabilities.

4. The main components of the C-3 table are made up as follows (\$b millions):

	<u>1963</u>	<u>1964</u>	<u>1965</u>	<u>1966</u>	<u>1967</u>
Line A. <u>Total Revenues</u>	954.6	1,036.8	943.6	991.6	1,057
Line A.1 (Central Government (Autonomous Agencies)	552.8 23.8	691.8 24.6	733.9 21.3	816.0 24.0	903.0 27.0
Line A.2 (U.S. Grants (U.N. Grants (Other Grants)	339.6 13.2 25.2	260.4 14.4 45.6	159.6 8.4 20.4	139.6 6.0 6.0	112.8 9.6 6.0
Line A.2a - Is the figure shown immediately above for U.S. Grants.					
Line B. <u>Total Expenditures</u>	<u>1,403.2</u>	<u>1,431.0</u>	<u>1,435.3</u>	<u>1,684.9</u>	<u>1,732.4</u>
<u>Current Expenditures</u>	<u>1,143.7</u>	<u>1,174.8</u>	<u>1,107.7</u>	<u>989.8</u>	<u>924.1</u>
Line B.1 National Defense	72.4	71.2	149.7	160.0	170.0
Line B.2-B.6 (Central Government (Autonomous Ag. (U.S. Grants (U.S. Loans (U.N. Grants (Other Grants (IDB and other loans	506.5 27.3 250.6 12.5 13.2 25.2 236.0	666.1 26.9 243.2 ----- 14.4 45.6 107.4	686.9 20.3 147.6 ----- 8.4 20.4 74.4	614.6 24.0 139.6 ----- 6.0 6.0 39.6	669.0 27.0 112.8 ----- 9.6 6.0 ---

Line B.7b (2) - Is the sum of the figures shown immediately above for U.S. Grants and U.S. loans

	<u>1963</u>	<u>1964</u>	<u>1965</u>	<u>1966</u>	<u>1967</u>
<u>Line B.7 Total Capital Outlay</u>	<u>259.5</u>	<u>256.2</u>	<u>327.6</u>	<u>695.1</u>	<u>738.0</u>
Central Government	13.9	27.0	28.4	34.6	51.0
Autonomous Agencies	3.1	2.6	4.0	6.8	13.0
U.S. Grants	89.0	17.2	---	---	---
U.S. Loans	137.5	97.2	175.2	464.5	488.4
IDB Loans	13.6	36.8	50.0	100.0	100.0
Other Loans	2.4	75.4	70.0	89.2	85.6

Line B.7b (2) - Is the sum of the figures shown immediately above for U.S. Grants and U.S. Loans.

5. The figures for 1966 reflect the GOB policy of reducing current expenditures and increasing capital outlays. Thus, a surplus on the Current Account of the Central Government of \$b. 41 million is projected for 1966 and of \$b. 64 million for 1967. (Central Government Revenues, minus Current Expenditures - Central Government, minus National Defense, as shown in Note 4 above). It has been assumed that these surpluses will be utilized for Capital Outlays; they are equal to the sum of the Capital Outlay Expenditures shown in Note 4 above for Central Government and Autonomous Agencies.

6. The following tabulation shows the percent change over the preceding year for certain of the key items appearing in Note 4.

	<u>Actual 1964</u>	<u>Budget 1965</u>	<u>P r o j e c t e d</u>	
			<u>1966</u>	<u>1967</u>
1) Total Revenue	8.6	-9.9	5.0	6.8
Central Government	25.2	6.1	11.2	10.7
2) Current Expenditures-Total	2.7	-6.0	-11.9	0.5
Central Government	27.4	13.5	8.0	8.3
3) Capital Outlay-Total	-1.3	27.9	112.1	6.2
Central Government	94.2	5.2	21.8	46.2
4) Total Expenditures	2.0	0.3	17.4	2.8

The increases in Central Government revenues average 11.0% for the two years 1966 and 1967. This increase is based on the following assumptions:

1. Increase in C.D.P.	5.0% (from C-1 table)
2. Increase in Prices (Cost of Living)	4.0% (from C-2 table)
3. Improved systems of collection	2.0%
4. Total annual rate of increase (average)	<u>11.0%</u>

Units of National Currency: Million of \$		Form AID 10-74 Line No.	Actual		Estimated		Projected	
Country	Fiscal Year Ending:		(1) FY 1963	(2) FY 1964	(3) FY 1965	(4) FY 1966	(5) FY 1967	(6) FY 1968
Revenues	1. Total Revenues From Domestic Sources	A.1	576.6	716.4	755.2	840.0	930.0	
	2. Total Revenues Originating from Counterpart and Foreign Grants including U.S.	A.2	378.0	320.4	168.4	151.6	125.0	
	(a) Total Counterpart and U.S. Grants (Non-additive)	A.2(a)	339.0	260.4	159.6	139.6	112.6	
	Total	A	954.6	1,036.8	923.6	991.6	1,055.0	
B. Expenditures	1. Total National Defense	B.1	72.4	71.2	149.7	160.0	170.0	
	(a) From Counterpart U.S. Grants and Loans (Non-additive)	B.1(b)						
	2. All Other Current	B.2-B.6	1,071.3	1,103.6	958.0	829.8	853.4	
	3. Total Capital Outlay, Civil Government	B.7	250.5	256.2	327.6	695.1	738.0	
	(a) From Counterpart, U.S. Grants and Loans (Non-additive)	B.7b(2)	226.5	114.4	175.2	464.5	468.4	
	Total	B	1,403.2	1,431.0	1,435.3	1,684.9	1,732.4	
C. Deficit or Surplus	1. Before Total Foreign Grants (Counterpart, U.S. & Non-U.S. Grants)	C.1	- 826.6	- 714.6	- 680.7	- 824.9	- 803.4	
	2. After Non-U.S. Foreign Grants	C.2	- 780.2	- 654.6	- 651.3	- 832.9	- 763.8	
	3. After Total Foreign Grants (Counterpart, U.S. & Non-U.S. Grants)	C.3	- 446.6	- 354.2	- 491.7	- 698.3	- 674.0	
D. Financing the deficit or Disposal of surplus(-) after foreign Grants	1. Total Domestic Borrowing (Net)	D.1	+ 45.0	+ 77.4	+ 92.1	-	-	
	2. Total Foreign Borrowing (Net) Including U.S.	D.2	+ 402.0	+ 316.8	+ 359.6	+ 653.3	+ 674.0	
	(a) U.S. Loans (Net) (Non-additive)	D.2(a)	150.0	97.2	175.2	464.5	468.4	
	3. Net change in cash balance and other Reserves	D.3	+ 1.6	-	+ 30.0	-	-	
	Total (Must equal C.3 above with sign reversed)		+ 446.6	+ 354.2	+ 491.7	+ 698.3	+ 674.0	
J. Ratio to GNP of Domestic Revenues and Expenditures	1. GNP in current Prices	-	7,465.7	8,607.7	9,399.6	-	-	
	2. Domestic Revenues (from A.1) as % of GNP	-	7.7	8.3	8.0	-	-	
	3. Total Expenditures (from B) as % of GNP	-	18.7	16.6	15.3	-	-	
	4. Defense Expenditures (from B.1) as % of GNP	-	1.0	0.8	1.6	-	-	

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BOLIVIA - CORPORACION MINERA DE BOLIVIA
(COMIBOL)

CHECK LIST OF STATUTORY CRITERIA (ALLIANCE FOR PROGRESS)

The following abbreviations are used:

FAA - Foreign Assistance Act of 1961, as amended by the Foreign Assistance Act of 1965.

App - Foreign Assistance and Related Agencies Appropriations Act, 1966.

1. FAA Section 102. Precautions have been and are being taken to assure that loan proceeds are not diverted to short-term emergency purposes (such as budgetary, balance of payments, or military purposes) or any other purpose not essential to the country's long-range economic development.

2. FAA Section 102. Information on measures taken to utilize United States Government excess personal property in lieu of the procurement of new items.

Excess property will be utilized when available. See Summary, 9-C-4.

3. FAA Section 102. Information whether the country permits, or fails to take adequate measures to prevent, the damage or destruction by mob action of United States property.

Adequate measures to prevent the damage or destruction by mob action of United States property have been taken by the Government of Bolivia.

4. FAA Section 201(d). Information and conclusion on legality (under laws of country and U.S.) and reasonableness of lending and relending terms of the loan.

Terms of this loan are legal under the laws of Bolivia and of the United States and are reasonable.

5. FAA Section 251(a). Manner in which loan will promote country's economic development and contribute to the welfare of its people.

This loan will increase foreign exchange earnings, increase employment, and increase national savings rate.

6. FAA Section 251(b)(1). Extent to which country is adhering to the principles of the Act of Bogota and Charter of Punta del Este and is showing a responsiveness to the vital economic, political, and social concerns of its people, and extent to which country has demonstrated a clear determination to take effective self-help measures.

Bolivia is adhering to the principles of the Act of Bogota and the Charter of Punta del Este.

7. FAA Section 251(b)(2). Information and conclusion on activity's economic and technical soundness.

See Sections II, III and IV of Loan Paper. The project financed under the loan is economically and technically sound.

8. FAA Section 251(b)(3). Information and conclusion on activity's relationship to and consistency with other development activities, and its contribution to realizable long-range objectives.

This activity is consistent with and is related to other development activities being undertaken or planned.

9. FAA Section 251(b)(4). Information and conclusion on possible effects on U.S. economy, with special reference to areas of substantial labor surplus.

The loan will have no foreseeable unfavorable effect on the U. S. economy.

10. FAA Section 251(b). Information and conclusion on availability of financing from other free world sources, including private sources within the United States.

Other free world sources are not available upon reasonable terms.

11. FAA Section 251(b). Information and conclusion on capacity of the country to repay the loan.

Bolivia has the economic resources to repay the loan. See Section IV.

12. FAA Section 251(b). Information and conclusion on country's efforts to repatriate capital invested in other countries by its own citizens.

Bolivia is making reasonable efforts to encourage repatriation of capital invested in other countries by its own citizens.

13. FAA Section 251(b). Information and conclusion on reasonable prospects of repayment.

It is believed that there are reasonable prospects of repayment of this loan.

14. FAA Section 251(e). Information and conclusion on availability of an application together with sufficient information and assurances to indicate reasonably that funds will be used in an economically and technically sound manner.

An application has been submitted by the Borrower. Such application reasonably indicates that the proceeds of the loan will be used in an economically and technically sound manner.

15. FAA Section 251(g). Information and conclusion on use of loan to assist in promoting the cooperative movement in Latin America.

Not applicable.

16. FAA Section 252(a). Total amount of money under loan which is going directly to private enterprise, is going to intermediate credit institutions or other borrowers for use by private enterprise, is being used to finance imports from private sources, or is otherwise being used to finance procurements from private sources.

Procurement under the loan will be from private U. S. sources.

17. FAA Section 601(a). Information and conclusions whether loan will encourage efforts of the country to: (a) increase the flow of international trade; (b) foster private initiative and competition; (c) encourage development and use of cooperatives, credit unions, and savings and loan associations; (d) discourage monopolistic practices; (e) improve technical efficiency of industry, agriculture, and commerce; and (f) strengthen free labor unions.

Loan funds will be used to improve Bolivia's mining industry, thus increasing the potential of international trade, and also increasing the technical efficiency of the mining industry.

18. FAA Section 601(b). Information and conclusion on how the loan will encourage U.S. private trade and investment abroad and how it will encourage private U.S. participation in foreign assistance programs (including U.S. private trade channels and the services of U.S. private enterprise.)

Participation of U. S. private enterprise will be made through the supplying of materials and equipment purchased with the proceeds of the loan.

19. FAA Section 601(d). Conclusion and supporting information on compliance with the Congressional policy that engineering and professional services of U.S. firms and their affiliates are to be used in connection with capital projects to the maximum extent consistent with the national interest.

This loan will cover the expenditures incurred by U.S. membership in the Advisory Group, including related technical services.

20. FAA Section 602. Information and conclusions whether loan will permit American small business to participate equitably in the furnishing of goods and services financed by it. American small business will have the opportunity to furnish goods.

21. FAA Section 604(a), App. Section 108. Compliance with restriction of commodity procurement to U.S. except as otherwise determined by the President and subject to statutory reporting requirements.

Will be complied with.

22. FAA Section 604(b). Compliance with bulk commodity procurement restriction to prices no higher than the market price prevailing in the U.S. at time of purchase.

Will be complied with.

23. FAA Section 604(d). Compliance with requirement that marine insurance be purchased on commodities if the host country discriminates, and that such insurance be placed in the U. S.

Will be complied with.

24. FAA Section 611(a)(1). Information and conclusion on availability of engineering, financial, and other plans necessary to carry out the assistance and of a reasonably firm estimate of the cost of the assistance to the United States.

Technical and financial planning for the project has been completed. See Section II.

25. FAA Section 611(a)(2). Necessary legislative action required within recipient country and basis for reasonable anticipation such action will be completed in time to permit orderly accomplishment of purposes of loan.

All necessary legislative action has been taken. See Section VI.

26. FAA Section 611(b), App. Section 101. If water or water-related land resource construction project or program, information and conclusion on benefit-cost computation.

Not applicable.

27. FAA Section 611(c). Compliance with requirement that contracts for construction be let on competitive basis to maximum extent practicable.

Will be complied with.

28. FAA Sections 612(b) and 636(h). Appropriate steps that have been taken to assure that, to the maximum extent possible, the country is contributing local currencies to meet the cost of contractual and other services and foreign currencies owned by the U.S. are utilized to meet the cost of contractual and other services.

Satisfied.

29. FAA Section 619. Compliance with requirement that assistance to newly independent countries be furnished through multilateral organizations or plans to maximum extent appropriate.

This loan is made in conjunction with the loans of the two other members of the "Triangular Operation" -- the Federal Republic of Germany and the Inter-American Development Bank.

30. FAA Section 620(a), App. Section 107(a). Compliance with prohibitions against assistance to Cuba and any country (a) which furnishes assistance to Cuba or failed to take appropriate steps by February 14, 1964 to prevent ships or aircraft under its registry from carrying equipment, materials, or supplies from or to Cuba; or (b) which sells, furnishes or permits any ships under its registry from carrying items of primary strategic significance, or items of economic assistance to Cuba.

Bolivia provides no assistance to Cuba, nor permits any ships or aircraft under Bolivian registry to carry any goods to or from Cuba.

31. FAA Section 620(b). If assistance to the government of a country, existence of determination it is not controlled by the international Communist movement.

Bolivia is not controlled by the international Communist movement.

32. FAA Section 620(c). If assistance to the government of a country, existence of indebtedness to a U.S. citizen for goods or services furnished or ordered where such citizen has exhausted available legal remedies or where the debt is not denied or contested by such government or the indebtedness arises under an unconditional guaranty given by such government.

Not applicable.

33. FAA Section 620(d). If assistance for any productive enterprise which will compete in the U.S. with U.S. enterprise, existence of agreement by the recipient country to prevent export to the U.S. of more than 20% of the enterprise's annual production during the life of the loan.

Not applicable.

34. FAA Section 620(e)(1). If assistance to the government of a country, extent to which it (including government agencies or sub-divisions) has, after January 1, 1962, taken steps to repudiate or nullify contracts or taken any action which has the effect of nationalizing, expropriating, or otherwise seizing ownership or control of property of U.S. citizens or entities beneficially owned by them without taking appropriate steps to discharge its obligations.

Bolivia has not taken such action.

35. FAA Section 620(f); App. Section 109. Compliance with prohibitions against assistance to any Communist country.

Bolivia is not a Communist country.

36. FAA Section 620(g). Compliance with prohibition against use of assistance to compensate owners for expropriated or nationalized property.

Not applicable.

37. FAA Section 620(h). Compliance with regulations and procedures adopted to insure against use of assistance in a manner which, contrary to the best interest of the U.S., promotes or assists the foreign aid projects or activities of the Communist-bloc countries.

This loan will not promote or assist activities of the Communist-bloc countries.

38. FAA Section 620(i). Existence of determination that the country is engaging in or preparing for aggressive military efforts.

Bolivia is not engaging in such efforts.

39. FAA Section 620(k). If construction of productive enterprise where aggregate value of assistance to be furnished by U.S. will exceed \$100 million, identification of statutory authority.

Not applicable.

40. FAA Section 620(l). Compliance with prohibition against assistance after December 31, 1966, for the government of a country which fails to institute investment guaranty program.

Will be complied with.

41. FAA Section 620(n); App. 107(b). Compliance with prohibition against assistance to countries which traffic or permit trafficking with North Vietnam.

Will be complied with.

42. FAA Section 620(o). If country has seized, or imposed any penalty or sanction against, any U.S. fishing vessel on account of its fishing activities in international waters, information on the consideration which has been given to excluding the country from assistance.

Not applicable.

43. FAA Section 621. Information and conclusion on how the loan in providing technical assistance will utilize to the fullest extent practicable goods and professional and other services from private enterprise on a contract basis. If the facilities of other Federal agencies will be utilized, information and conclusion on whether they are particularly suitable, are not competitive with private enterprise, and can be made available without undue interference with domestic programs.

Functions of the Advisory Group will include the use of mining-related technical services from the U. S. as required. See Section II-C-1.

44. App. (Section Unnumbered). Use of funds to carry out FAA Section 205, which pertains to IDA.

No funds will be made available to the IDA.

45. App. Section 102. Compliance with requirement that payments in excess of \$25,000 for architectural and engineering services on any one project be reported to Congress.

Will be complied with.

46. App. Section 104. Compliance with bar against funds to pay pensions, etc., for military personnel.

Funds will not be used for such purposes.

47. App. Section 106. If country attempts to create distinctions because of their race or religion among Americans in granting personal or commercial access or other rights otherwise available to U. S. citizens generally, application which will be made in negotiations of contrary principles as expressed by Congress.

Will be complied with.

48. App. Section 111. Compliance with existing requirements for security clearance of personnel.

Will be complied with.

49. App. Section 112. Compliance with requirement for approval of contractors and contract terms for capital projects.

Will be complied with.

50. App. Section 114. Compliance with bar against use of funds to pay assessments, etc., of U.N. member.

Will be complied with.

51. App. Section 115. Compliance with regulations on employment of U.S. and local personnel for funds obligated after April 30, 1964, (Regulation 7).

Will be complied with.

52. App. Section 401. Compliance with bar against use of funds for publicity or propaganda purposes within U.S. not heretofore authorized by Congress.

Will be complied with.

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ANNEX III
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CORPORACION MINERA DE BOLIVIA
(COMIBOL)

ENGINEERING TABLES

INDEX

- Exhibit A Map Of Bolivia
- Exhibit B Yearly Production Averages 1961 - 1964
- Exhibit C Monthly Production Averages for 1965
- Exhibit D Graph: Number of Workers and Tin Production
- Exhibit E Administrative Budget

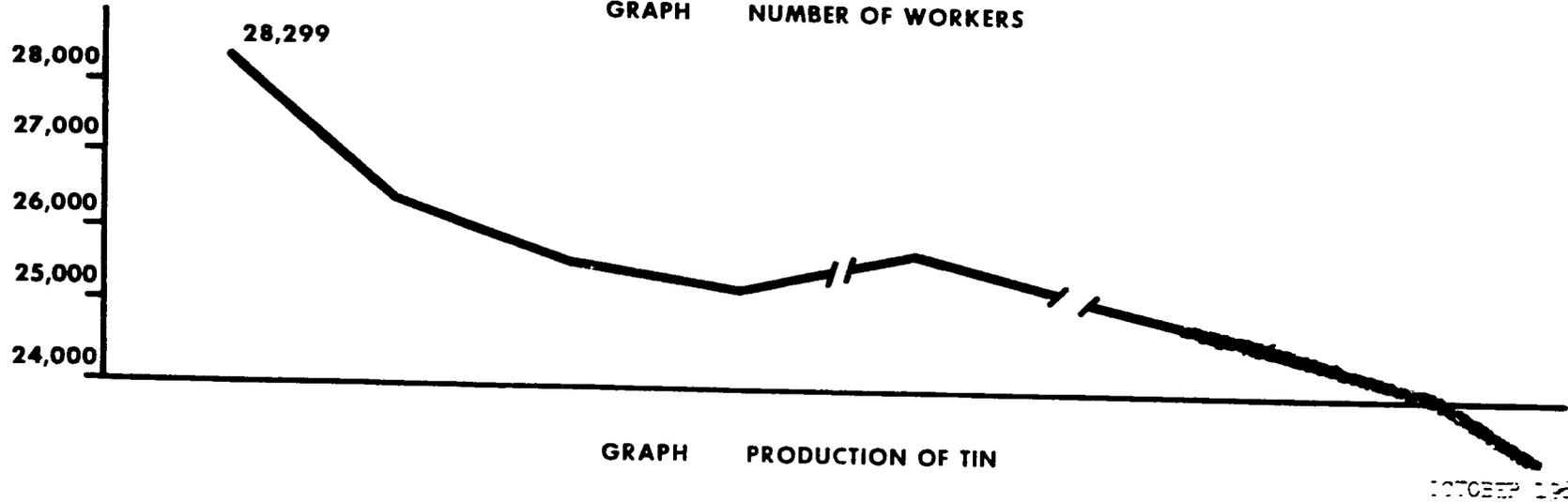
Production Monthly Averages for Years 1961-1964

	<u>1961</u>	<u>1962</u>	<u>1963</u>	<u>1964</u>
<u>Average Monthly Production</u> (Kilos fine tin)				
Catavi	355,156	345,058	296,269	363,136
Colquiri	217,256	195,899	183,141	174,164
Huanuni	223,302	205,592	220,418	214,645
Other Mines	440,088	525,189	582,963	724,179
Total	<u>1,235,802</u>	<u>1,271,738</u>	<u>1,282,791</u>	<u>1,476,124</u>
<u>Average Mill Heads (% Tin)</u>				
Catavi	0,62	0,55	0,55	0,54
Colquiri	0,93	0,84	0,83	0,84
Huanuni	1,00	0,88	0,89	0,77
Other Mines	1,35	1,43	1,37	1,25
Total	<u>0,84</u>	<u>0,78</u>	<u>0,83</u>	<u>0,82</u>
<u>Average Tons Tin Ore Treated</u>				
Catavi	112,661,9	122,004,0	90,030,4	98,829,9
Colquiri	37,420,3	39,500,4	40,286,9	38,650,6
Huanuni	14,086,3	16,706,8	17,102,8	17,470,2
Other Mines	37,708,4	37,515,4	45,419,6	65,074,1
Total	<u>201,876,9</u>	<u>215,726,6</u>	<u>192,839,7</u>	<u>220,025,1</u>

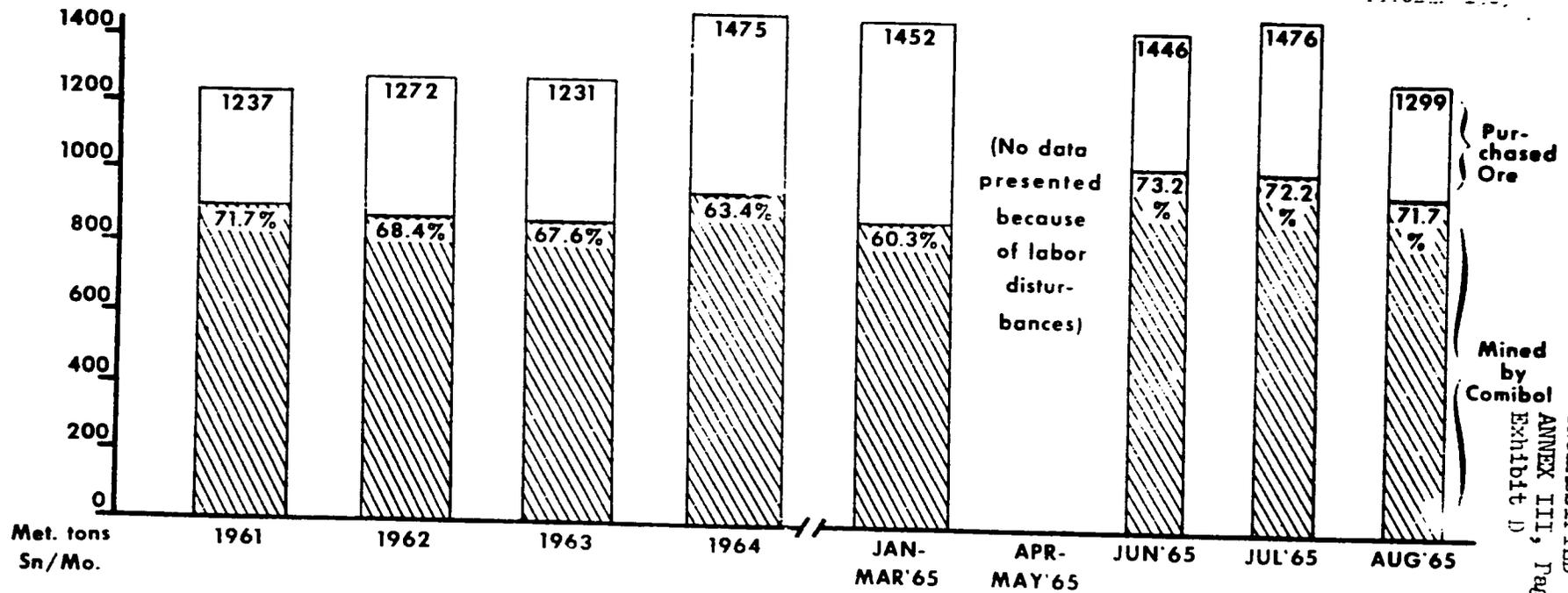
Production Averages by Month for 1965

	<u>January</u>	<u>February</u>	<u>March</u>	<u>April</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>September</u>	<u>October</u>
<u>Average Monthly Production MT</u> (fine tin)									
Catavi	386.5	413.5	339.5	399.5	347.4	472.9	383.4	308.2	300.2
Colquiri	172.9	142.7	126.3	151.5	116.9	195.4	184.3	153.9	158.8
Huanuni	121.6	374.8	215.0	215.7	217.5	90.0	234.1	193.0	191.9
Other Mines	707.7	676.3	679.2	710.9	508.2	687.5	673.7	644.0	688.5
Total	1,388.7	1,607.3	1,359.8	1,477.6	1,190.0	1,445.8	1,475.5	1,299.1	1,339.4
<u>Average Mill Heads (% Tin)</u>									
Catavi	0,50	0,46	0,49	0,51	0,57	0,56	0,51	0,56	0,57
Colquiri	0,82	0,77	0,75	0,76	0,77	0,86	0,87	0,89	0,86
Huanuni	0,75	0,73	0,68	0,68	0,69	0,69	0,77	0,75	0,82
Other Mines	1,16	1,20	1,15	1,11	1,11	1,13	1,11	1,16	1,53
Total	0,77	0,76	0,76	0,76	0,78	0,81	0,78	0,84	0,94
<u>Average Tons Tin Ore Treated</u>									
Catavi	107,897	95,405	94,032	105,189	73,738	96,172	115,546	82,149	74,280
Colquiri	40,662	36,402	33,881	38,771	28,059	43,037	39,483	30,923	31,936
Huanuni	19,686	14,633	16,406	19,484	13,583	19,677	21,157	15,818	16,532
Other Mines	68,525	63,738	68,717	78,463	52,319	79,450	84,203	74,547	56,180
Total	236,770	210,178	213,036	241,907	167,699	238,336	260,389	203,437	178,928

GRAPH NUMBER OF WORKERS



GRAPH PRODUCTION OF TIN



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ANNEX III, Page 1 of 1
Exhibit D

BUDGET FOR ADMINISTRATIVE AND TECHNICAL ASSISTANCE

THIRD PHASE OF TRIANGULAR OPERATION

(U.S. \$)

	<u>1st</u> <u>year</u>	<u>2nd</u> <u>year</u>	<u>Phasing</u> <u>out</u> <u>Period</u>	<u>Total</u>
1. Travel, recruiting, interview, etc. (1)	28,000(1)	8,000		36,000
2. Communications	1,800(1)	200		2,000
3. Relocations, transportations	24,000(1)	12,000		36,000
4. Relocation allowance	19,600	2,800		22,400
5. Salaries	480,000	576,000	96,000	1,152,000
6. Post allowance (pesos) (2)	72,000	86,400	14,400	172,800
7. Insurance: medical, life accident	9,600	11,520	1,920	23,040
8. Accumulated vacation pay	31,960	38,400	6,360	76,720
9. Accumulated repatriations	41,040	36,000	12,000	89,040
10. Miscellaneous & Contingencies	24,600	3,000	7,400	35,000
11. Administration 3%	22,000	21,000	4,000	47,000
Totals	754,600	795,320	142,080	1,692,000
Less proposed German Loan to be made separately				<u>100,000</u>
Total 3rd Phase Triangular Operation				1,592,000

- (1) Allows for recruiting 4 replacements for reasons of failure, health, etc.
- (2) Budget contains "peso boliviano" equivalent of US \$200,000 if post allowance and international travel originating in Bolivia are paid and purchased in pesos.
- (3) Source: Advisory Group.

CORPORACION MINERA DE BOLIVIA
(COMIBOL)

	(In Thousands of Dollars)	
	December 31	December 31
	<u>1963</u>	<u>1964</u>
<u>Sale of Minerals</u>		
Less: Costs of shipment and refining	45,570	68,992
	<u>9,514</u>	<u>12,036</u>
	<u>36,056</u>	<u>56,956</u>
<u>Expenses</u>		
Wages and Salaries	24,913	27,296
Materials and Spare Parts	8,308	8,767
Depreciation	1,700	1,782
Other Direct Costs	2,659	2,597
Costs of Supplementary Operations	567	916
Purchase of Mineral Concentrates	3,889	7,650
Mineral Inventory Variation	264	(406)
	<u>42,300</u>	<u>48,602</u>
Expenses of Central Office & Agencies	2,644	3,702
Research and Exploration	---	697
Expense of maintaining non-operating mines	241	150
	<u>45,185</u>	<u>53,151</u>
	(9,129)	3,805
Regalias (Export Taxes)	(5,140)	(9,429)
Loss from Mining Operations	(14,269)	(5,624)
Adjustment for previous years Sales	165	3,667
	<u>(14,104)</u>	<u>(1,957)</u>
Loss from Other Operations	(2,853)	(2,729)
Net Loss	<u>(16,957)</u>	<u>(4,691)</u>

CORPORACION MINERA DE BOLIVIA
(COMIBOL)

CASH FLOW PROJECTION 1965-1970
(in thousands of dollars)

	<u>1965</u>	<u>1966</u>	<u>1967</u>	<u>1968</u>	<u>1969</u>	<u>1970</u>
<u>SALE OF MINERALS</u>	62,700	62,500	62,500	62,500	62,500	62,500
<u>COST AND EXPENSES</u>						
Wages and Salaries	23,300	21,000	21,000	21,000	21,000	21,630
Materials and Spare Parts	8,700	8,300	8,300	8,300	8,300	8,300
Depreciation	1,800	1,875	1,950	2,000	2,050	2,100
Purchase of Mineral Concentrates	9,400	8,300	8,300	8,300	8,300	8,300
Expenses of Central Office and Agencies	4,030	3,200	3,200	3,200	3,200	3,300
Other Direct Costs	3,022	3,940		3,890	3,850	3,800
<u>FINANCIAL EXPENSES</u>						
Interest on Existing Loans	2,195	2,195	1,758	1,592	1,546	1,321
Interest on 3rd Phase Loans	-	174	307	391	365	328
Other Expenses	-	600	650	650	700	700
<u>3RD PHASE LOAN AMORTIZATION</u>	-	554	1,115	1,133	1,133	1,133
<u>TOTAL EXPENDITURES</u>	<u>52,447</u>	<u>50,138</u>	<u>50,520</u>	<u>50,456</u>	<u>50,444</u>	<u>50,912</u>
Profit before Export Taxes and Profit-Sharing	10,253	12,362	11,980	12,044	12,056	11,588
<u>EXPORT TAXES</u>	<u>(10,133)</u>	<u>(7,340)</u>	<u>(7,340)</u>	<u>(7,340)</u>	<u>(7,340)</u>	<u>(7,340)</u>
Profit before Profit-Sharing	120	5,022	4,640	4,704	4,716	4,248
<u>PROFIT-SHARING PLAN</u>	<u>730</u>	<u>2,511</u>	<u>2,320</u>	<u>2,352</u>	<u>2,358</u>	<u>2,124</u>
Net Profit/Loss	(610)	2,511	2,320	2,352	2,358	2,124

Note: 1965 figure unaudited

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 ANNEX IV
 Exhibit B

COMIBOL - COST PER POUND OF FINE TIN

	<u>Cost at Mine Including Depreciation</u>	<u>Export Taxes</u>	<u>Realization Costs</u>	<u>Cost Placed on Market</u>	<u>World Price</u>
<u>1962</u>					
Mill Production	1.21	0.11	0.24	1.56	
Purchases	0.62	0.13	0.21	0.96	
Total	1.13	0.11	0.24	1.48	1.12
<u>1963</u>					
Mill Production	1.21	0.15	0.24	1.60	
Purchases	0.65	0.16	0.21	1.02	
Total	1.11	0.15	0.23	1.49	1.14
<u>1964</u>					
Mill Production	1.21	0.24	0.27	1.72	
Purchases	0.85	0.25	0.25	1.35	
Total	1.13	0.25	0.26	1.64	1.55
<u>First half 1965</u>					
Mill Production	1.35	0.29	0.25	1.89	
Purchases	0.92	0.29	0.26	1.47	
Total	1.24	0.29	0.25	1.78	1.68
<u>July 1965</u>					
Mill Production	1.01	0.31	0.24	1.56	
Purchases	0.97	0.31	0.27	1.55	
Total	1.00	0.31	0.25	1.56	1.80
<u>August 1965</u>					
Mill Production	1.10	0.31	0.26	1.67	
Purchases	0.97	0.31	0.29	1.57	
Total	1.07	0.31	0.27	1.65	1.85
<u>September 1965</u>					
Mill Production	1.09	0.32	0.27	1.68	
Purchases	1.03	0.31	0.31	1.65	
Total	1.07	0.32	0.28	1.67	1.91
<u>October 1965</u>					
Mill Production	1.04	0.26	0.26	1.56	
Purchases	1.00	0.25	0.31	1.56	
Total	1.03	0.25	0.28	1.56	1.82
<u>November 1965</u>					
Mill Production	1.15	0.19	0.26	1.60	
Purchases	0.97	0.19	0.33	1.29	
Total	1.12	0.19	0.27	1.58	1.73
<u>December 1965</u>					
Mill Production	1.07	0.19	0.27	1.53	
Purchases	1.05	0.17	0.32	1.54	
Total	1.07	0.18	0.28	1.53	1.76
<u>Second half 1965</u>					
Mill Production	1.08	0.26	0.26	1.61	
Purchases	1.00	0.26	0.31	1.57	
Total	1.06	0.26	0.27	1.60	1.81
<u>Total 1965</u>					
Mill Production	1.22	0.27	0.26	1.75	
Purchases	0.96	0.27	0.28	1.52	
Total	1.15	0.27	0.27	1.69	1.74

LOAN AUTHORIZATION

Provided From: Alliance for Progress Funds
BOLIVIA: COMIBOL - Third Phase Triangular Plan

Pursuant to the authority vested in the Deputy U.S. Coordinator, Agency for International Development ("A.I.D.") by the Foreign Assistance Act of 1961, as amended, and the delegations of authority issued thereunder, I hereby authorize the establishment of a loan ("Loan") pursuant to Part I, Chapter 2, Title VI, Alliance for Progress, to the Corporacion Minera de Bolivia ("Borrower") of not to exceed one million one hundred thousand United States dollars (\$1,100,000) to assist in financing the dollar and local costs of the Third Phase of the Rehabilitation Plan for the Borrower in conjunction with the Inter-American Development Bank and the Kreditanstalt fur Wiederaufbau of the Federal Republic of Germany, under the supervision of the Advisory Group established by the financing parties. This loan is to be subject to the following terms and conditions:

1. Interest and Terms of Repayment

- (a) The Borrower shall repay the loan to A.I.D. in United States dollars within thirteen (13) years from the first disbursement under the loan, including a grace period of not to exceed three (3) years. The Borrower shall pay to A.I.D. in United States dollars interest at the rate of four (4) percent on the disbursed balance of the loan.
- (b) If prior to the date on which the first interest payment is due the Government of Bolivia ("Government") so elects the Borrower shall fulfill its dollar obligation under the loan by paying the Government in the currency of Bolivia, at the times called for in the loan agreement, the equivalent of the United States dollar amounts payable to A.I.D. under (a) above, and in such event the Government shall pay to A.I.D.:
 - (i) the equivalent in United States dollars, determined as of a time and in a manner calculated to obtain repayment of all dollars disbursed plus interest of all amounts paid to Government by Borrower as follows:

- (a) all interest immediately upon receipt subject to Government's right to retain all payments in excess of one percent (1%) per annum accrued during a grace period of not to exceed ten (10) years from the first disbursement under the loan ("Government Grace Period"), and two and one-half percent ($2\frac{1}{2}\%$) per annum thereafter;
- (b) principal within forty (40) years, including the Government Grace Period;
- (ii) interest in United States dollars of one percent (1%) per annum during the Government Grace Period, and two and one-half percent ($2\frac{1}{2}\%$) per annum thereafter on all amounts of outstanding principal paid by Borrower to Government from the respective dates of such payments of principal.

2. Other Terms and Conditions

- (a) As a condition precedent to initial disbursement, Borrower shall demonstrate that all of the conditions precedent to disbursement of the respective loans of the Inter-American Development Bank and the Federal Republic of Germany have been satisfied.
- (b) The Loan shall be subject to such other terms and conditions as A.I.D. may deem advisable.

Deputy U.S. Coordinator
Alliance for Progress

Date

DECREES

1. Supreme Decree No. 07171, May 17, 1969

General of the Armed Forces, Rene Barrientos Ortuno,
President of the Military Government

CONSIDERING:

That the General Labor Law, in defining the functions of Labor Unions, states that they are democratic instruments through which the country's working classes express and defend their social and economic rights.

That labor-union privileges are the most advanced expression of social-democracy existing in Bolivia, which means that labor-union leaders have the right to fulfill their duties, as specified, with the guarantee of the Law and the Public Powers, so long as they act in accordance with the fundamental principles that govern this revolutionary conquest.

That it is necessary that labor-union functions should recover their original and revolutionary inspiration by the practice of the internal democracy natural to it, which permits the election of labor-union leaders without the influence of party politics, but rather by observance of the laws, which are opposed to political sectarianism, and anarchism, which have been practiced by labor organizations throughout the country.

That it is necessary to protect the interests of labor, which in no case should be subordinated to active politics.

That the abuse in practice of labors' rights has detracted from their real functions and value, and the juridic nature of labor-union privileges owing to the noxious influence and the intromission of persons and influences which have deflected its activities, which is caused by the demagoguery of the leaders who obey the instructions of international and sectarian politicians, and abusing the confidence and good faith of the working classes, take advantage of the situation to serve their own personal ends, or those of certain purely political groups and others of an international political character. This is aggravated by agitators who have become members of labor organizations, and who, through publications acquired with union funds, incite to violence for purposes of pillage.

In a Meeting of Ministers

DECREES:

Article 1. Labor Union privileges are recognized for all those leaders who are democratically elected and who take no active part in party politics.

Article 2. All the Labor Unions of the Republic must reorganize their committees by democratic elections within 40 days from this date, and on this basis all unions will be reorganized on a departmental and national scale.

Article 3. To become a member of a labor union committee, it is indispensable that the candidate be a worker in active service in the respective mine enterprise; the candidate must also fulfill the conditions demanded by the General Labor Law.

Article 4. Leaders of political parties or groups may not be members of any labor union committee.

Article 5. For the effects of this Decree, the functions of all the leaders of Labor Unions, Federations, Confederations, and Workmens' Labor Centers are hereby declared to have expired. The said organizations must be governed by provisional committees, elected at extraordinary meetings, which will act until completion of reorganization, as set forth in Article 2.

Article 6. The Labor Authorities will not recognize as a labor leader any person who does not comply with the requisite conditions established in this Decree.

All laws and regulations contrary to the present Decree are hereby annulled.

The Minister of Labor & Social Security is hereby charged with the execution of, and compliance with this Decree.

(signed) Rene Barrientos Ortuno, General of the Aviation Forces,
and by 13 Ministers of State.

Given in the Government Palace in the City of La Paz on May 17, 1965.

2. Supreme Decree No. 07187, May 23, 1965

General of the Air Forces Rene Barrientos Ortuno
President of the Military Government

CONSIDERING:

That as a consequence of the demagogic and irresponsible policy of the Government after 1952, the Corporacion Minera de Bolivia incorporated several thousands of workers in excess of the maximum necessities and this, together with the disorganized system of salaries and wages, caused an irresistible increase of production costs in nationalized mining.

That because of the social policy of the Military Government it is not possible to deprive the said groups of workers of the possibility of earning their livelihood and supporting their families.

That the Corporacion Minera de Bolivia has small mining properties, whose exploitation by co-operatives would be convenient and would absorb supernumeraries.

That at the same time it is necessary to rationalize the work of the co-operatives already in existence and to fix the limits of their commercial relations with the Corporacion Minera de Bolivia.

That, as the nationalized mining industry, as a consequence of the erroneous economic and social policy of the last twelve years, side by side with this there has been increased unemployment among the underground workers, who at present are living in the mining centers, thus causing one of the most serious social problems of the present time.

That also, in the plans and projects of the Supreme Government for economic and social development there is the possibility of offering the unemployed miners work in connection with the said plans and projects, and taking into account their special living conditions.

At a Cabinet meeting of the Military Government,

DECREES:

Article 1. The Corporacion Minera de Bolivia is hereby authorized to rent its small mining properties to Co-operative Societies constituted by the workers who retire voluntarily and declare their desire to organize themselves in the properties referred to, under the guidance of the Corporation, their constitution and operations to be subject to the General Law of the Co-operatives of September 13, 1958. Between the Corporation and the said workers it is agreed that the latter's social benefits shall be totally used for operating their cooperatives.

Article 2. The Corporacion Minera de Bolivia shall place at the disposal of the cooperatives whatever technical aid may be necessary.

Article 3. The Corporacion is also authorized to enter into contracts with the free cooperatives already in existence for the exploitation of minerals, but only under the following conditions:

- a) In areas distant from those being exploited by the "enterprises" (of the Corporacion which shall be indicated by the Corporacion Minera de Bolivia.
- b) One person only from each family, who must prove to have been unemployed and living in the respective zone previous to December 31, 1964, and only while said person's unemployed situation lasts.

Article 4. In the plans of colonization, road construction, hydro-electric power and others under the auspices of the Ministry of National Economy and the Corporacion Boliviana de Fomento, the unemployed miners shall be given preference for employment, and for this purpose the Corporacion Minera de Bolivia shall make a census of the unemployed, in cooperation with the Ministry of Labor & Social Security.

The Ministers of Mines & Petroleum, Labor & Social Security, National Economy, and the Minister-President of the Corporacion Minera de Bolivia are hereby charged with the execution and compliance with the present Supreme Decree.

Given in the Government Palace, La Paz on May 23, 1965
Signatures of the President of the Military Government and
13 Ministers.

3. Supreme Decree No. 07188, May 23, 1965

General of the Air Forces Rene Barrientos Ortuno
President of the Military Government

CONSIDERING:

That the nationalization of the mines is a popular victory of the people which cannot be reversed and was inspired by the idea that the exploitation of the country's mineral wealth would benefit the Bolivian people and would sustain the national economy. It is therefore imperative to save this institution by rectifying the errors committed by the deposed regime:

That as a consequence of the erroneous policy of the governments that were in power until November 3, 1964, these objectives were not reached; on the contrary, the institution created for management of the nationalized mines was decapitalized, and during the years after 1952, more than One Hundred Million dollars were misappropriated and applied to experimental economy diversifications in the field of industry not properly planned and not conducive to the harmonious development of the national economy.

That during 12 years the most alarming and unlimited demagoguery prevailed which never has occurred before in our history, by means of an irresponsible wage policy that necessitated, and still necessitates, the unproductive expenditure of large sums of money.

That since 1953 a series of measures were put in force, granting privileges to certain sectors with the sole object of obtaining unconditional political support, with the idea that this was the surest method of indefinitely retaining political power at any cost. This policy created an atmosphere of frustration and ill-will, as harmful as it was useless, among the various social classes of our people.

That extremist and anarchistic leaders, stimulated by official granting of funds, brought about the permanent violation of the basic rules of respect and discipline among the workers, giving rise to armed rebellion under the command of chiefs (caciques) which converted some mining zones into feudal dominions, which made rational technical and administrative management impossible, with the consequent disorderly and anti-economic exploitation of the mines.

- That due to the almost absolute lack of order and authority in some mining centers, the theft of minerals and materials and the unbridled practice of certain irregular methods of exploitation have become unlimited.

That the reports of the National Investigating Commission (Comision Investigadora Nacional) establish that the Head Office of the Corporacion Minera de Bolivia was converted into a source of funds for the governing party, placed exclusively at the service of politicians and favorites, with absolute disregard for moral conduct and the purposes of the Corporacion.

That since the end of 1953 until the end of 1964 an irrational system of wages was implanted in the majority of the mines, with a contrary effect, since instead of stimulating production it only originated a disproportionate increase of labor costs, and has intensified social unrest among the working classes.

That the efforts and funds for the rehabilitation of nationalized mining by the Triangular Operation have had no positive results, making it impossible to carry out the Third Phase of increased operations and development, and leaving the Corporacion with a considerable debt.

That the audit of the Corporacion accounts of the first quarter of this year demonstrates that in the course of the next few months an inevitable collapse must be faced, whose disastrous effects for the country will also be felt by the miners themselves, if immediate and adequate measures are not taken.

That owing to the factors referred to above, the Corporacion has not fulfilled the functions for which it was created but rather, directly or indirectly has been the cause of the country's economic stagnation, particularly in the public sector, because of wage and salary inequalities, and as a consequence, industrial stagnation and a commercial crisis.

That this phenomenon would seriously affect the life of the whole nation by giving rise to another period of inflation, that might lead to political events or unforeseeable consequences of a political, economic and social nature.

- That it is necessary to implant a policy of rehabilitation of the nationalized mining industry, with the patriotic assistance of all Bolivians and particularly that of the miners, in order to save the country.

That to enter a constitutional period, it is imperative that the principal industrial entity of the country shall be in a healthy condition, as the best basis for accomplishing the welfare and progress of the Bolivian people.

At a meeting of the Military Government,

DECREES:

Article 1. The Corporacion Minera de Bolivia is hereby declared to be in a state of emergency until its industrial recovery.

Article 2. That there be established in all nationalized mines a rational and uniform system of work, remuneration and contracts on the basis of the necessities of the workers living conditions, that will adjust production costs to market prices, and enable the Corporacion to enter a profit-earning period.

Article 3. In conformity with the preceding article, from June 1st, 1965, there shall be in force generally, in all the Corporacion mines, the same scale of salaries, wages and contract prices as were paid by the Empresa Minera Quechisla at the 31st August, 1964. Therefore, all the previous and present systems are cancelled as regards scales, bonuses, plans and pertinent payment agreements in all the Corporacion mines and establishments. In the Head Office, Agencies, Sub-managers' offices and warehouses, the system of August 31st, 1964, will also be applied.

Article 4. In conformity with the present laws and as a consequence of what is established in Article 2 of the present decree, the Corporacion will liquidate and pay the social benefits of the workers affected by this measure.

Article 5. The Corporacion is authorized to recontract its personnel.

Article 6. The employees and workmen of the nationalized enterprises shall benefit by the guarantees granted by law; those who

wish to retire voluntarily, and not to be recontracted, must give 90 days - notice of their retirement, to be entitled to the payment of social benefits, otherwise they may lose this right.

Article 7. Until recovery of the nationalized mining industry is accomplished, the Corporacion Minera de Bolivia is authorized to contract, transfer, or dismiss employees and workmen, as necessitated by national operations.

Article 8. The social benefits of the recontracted workers will be credited to them after deduction of their debts to the Corporacion. Interest will be credited on the payment of the social benefits to employees and workmen, from the date of the application of this decree until payment has been effected. The final settlements must be approved by the Ministry of Labor and Social Security.

Article 9. For the payment of the legal bonus, the Corporacion will recognize 25% of it to the workers of the directly-exploited mines which make profits. Up to 25% of the total net profits of the Corporacion shall be available for distribution among all its personnel, exclusively and exceptionally as an inducement to increase production; this will include all the enterprises that had not earned profits.

Article 10. The prices of the four commissary articles shall remain fixed. (Meat, bread, sugar, rice).

Article 11. In all nationalized mines the practices known as "pirquin", "chameros", "achuras", "Seleccion de gula", "thinka" and "preparacion de medias barrillas" shall be abolished, as they are irregular and harmful.

Article 12. In the mine centers and dependencias of the Corporacion it is prohibited to hold labor-union meetings or meetings of any kind in working hours, whatever may be their object. Those who break this rule will be immediately dismissed without payment of social benefits.

Article 13. In accordance with clause (g) of the General Labor Law or the same clause of Article 9 of the Regulatory Decree he who steals minerals, materials, explosives, tools or any other property of the Corporacion Minera de Bolivia, will be immediately dismissed without the right to social benefits, and will be placed at the disposal of the ordinary courts of justice, just the same as in the case of a person not belonging to the entity.

Article 14. No labor leader, institution or labor group may - interfere to prevent lawful punishment of the infractors of the rule in Article 13. In cases of concealment or protection of delinquents, use of physical force or threats of sabotage against any installation or official of the entity by third persons, if they are dependents of the Corporacion, they will be dismissed without payment of social benefits, whatever may be the nature of their employment.

Article 15. Minors who commit the acts mentioned in Article 13 of this decree will be placed under the jurisdiction of the "Patronato Nacional de Menores".

Article 16. All mining enterprises will do whatever may be considered necessary for the physical protection of their property and installations against robbery and sabotage.

Article 17. The unjustified absence from work for six consecutive working days or eight intermittent days, in this latter case in the course of a month, will cause the dismissal of the worker without the right to social benefits.

Article 18. In recognition of the difficult work conditions of the miner, and in order to conserve human labor, vacation pay will be averaged over the remuneration of the last three months.

Article 19. All workers, groups of workers, or labor leaders who commit the offenses, or any one of them detailed below, will be liable to the penalties indicated in the following Article and those contained in the Penal Code:

- a) To expel, retire, outrage by word or deed, deprive of liberty in any way, the technical personnel, administrative staff or worker of the Corporacion Minera de Bolivia.
- b) To prevent personnel appointments made by the competent authorities of the Corporacion, and to oppose or obstruct members of the personnel in the performance of their duties.
- c) To prevent the transfer, change, or retirement of employees if such measures have been ordered by the competent authorities.

- d) To oppose in any way the movement of materials or equipment within or without the mines or establishments of the Corporacion; also to resist the execution of orders of a technical or administrative nature.

Article 20. Infractions of the preceding regulations will be penalized by immediate dismissal without payment of social benefits, whoever may be the offender or offenders, without prejudice to action under criminal law.

All laws and regulations contrary to the provisions of this decree-law are hereby annulled.

The Ministers of Mines & Petroleum, National Defense, Government, Labor & Social Security and the Minister-President of the Corporacion Minera de Bolivia are charged with the execution of and compliance with this Decree-law.

Given in the Government Palace in the city of La Paz on May 23, 1965.

Signed: General of the Armed Forces, Rene Barrientos Ortuno
and 13 Ministers of State

SUMMARY OF COMIBOL

Reorganization Decree

No. 07474

- Article 1 - Describes COMIBOL - legal entity with right to run its own affairs and as an "Industrial Enterprise"
- " 2 - Recognizes its rights to make its own internal regulations for administration, budgets, selling of minerals, social relations, etc.
- " 3 - Policy of COMIBOL made by Directory composed of a President named by President of Republic and 4 directors named by the Cabinet (no control obrero directors).
- " 4 - Minister of Mines continues his relation with COMIBOL as previously defined.
- " 5 - COMIBOL's relations with its employees shall be according to the labor law. No interference by any other persons political or union.
- " 6 - All accounts up to December 1965 with other Government agencies shall be given to Minister of Hacienda who will balance off with regalías.
- " 7 - All balances of regalías at December 31, 1965, shall pass to Minister of Economy who shall capitalize these for COMIBOL's capital.
- " 8 - Future accounts with GOB cancelled by regalías.
- " 9 - No contracts of any kind can be retroactive.
- " 10 - Regalías 1966 on will be paid subject to COMIBOL's capacity to pay after meeting all obligations particularly Triangular Operation.
- " 11 - Minister of Hacienda pays directly amounts paid to: Universities, Tin Council, Tin Research Counsel formerly paid by COMIBOL.

- " 12 - COMIBOL continues to pay certain employees of Minister of Mines, U.N. as long as present contracts in force charge to regalias - cannot make new contracts.
- " 13 - Costs of Arts. 10 & 12 charged to regalias.
- " 14 - COMIBOL and Minister of Health to determine better way of giving health services.
- " 15 - COMIBOL continue with Audit by recognized auditors. This control does not replace Controller General of the Republic or Advigrup.
- " 16 - After each audit report a Commission named by the Government will certify this and that the COMIBOL is properly administered.
- " 17 - Minister of Economy appoints a member to COMIBOL's Purchasing Commission.
- " 18 - Decrees Nos. 06826 and 07343 continue in effect where they do not conflict with this decree.
- " 19 - The Minister of Education and COMIBOL will determine jointly the best way of running COMIBOL's schools - without diminishing service of COMIBOL's legal obligation (costs).
- " 20 - Teachers are excluded from COMIBOL (primas) profit sharing.
- " 21 - Secondary schools operated by COMIBOL pass to account of Government.
- " 22 - COMIBOL will continue to pay for the metallurgical research laboratory for account of Government.
- " 23 - COMIBOL will submit for approval of the President of Republic all contracts for sale of minerals, rental of mines, or foreign financing.

Huanuni cooperatives concerning their removal to presently unworked COMIBOL mines.

3. Cost Reduction

COMIBOL will have available its cost figures for July on approximately September 5. Data available for June indicates that the enterprise showed an overall profit of approximately \$600,000 in that month. This compares to an average loss for the first four months of over \$800,000 per month. This has been achieved in part by better labor discipline and management control and in part by wage reductions, particularly in those mines in which under the recategorization program workers' income had reached excessive levels.

COMIBOL is taking the policy that there can be no basic salary modifications before the end of the year. It is, however, undertaking a system of advance payment of profit shares and an increase in authorized commissary purchases in proportion to the share of profits.

4. Production

Production is expected to reach 17,500 tons this year. The tin content of ore mined has risen since the May decrees. Tin content rose from an average of .76 for the first five months to .81 in June. In Catavi tin content rose from .52 to .56. In Colquiri tin content rose from .77 in May to .91 in August. COMIBOL points to the improvement in tin content and the corresponding increase in recovery as the best evidence of improved control over theft of high quality ores.

5. Labor Force

COMIBOL reduced its total labor force between May and June by approximately 1300 workers. It is furnishing further detailed breakdown of this reduction. With regard to layoffs in the balance of the year, such layoffs, all of which would be voluntary, depend on COMIBOL's financial position. The cost per layoff would be approximately \$850.00. Ideally COMIBOL would like to reduce its labor force at the rate of .5% the month until reaching an economical level.

FINDINGS OF THE REVIEW GROUP
AUGUST 1965

1. Labor Discipline

Theft of ore has been reduced though not completely controlled. The principal mines in which theft still occurs are Huanuni and San Jose. According to COMIBOL in three mines - Unificada, Huanuni and Colquiri - workers caught stealing ore have been fired without payment of social benefits. In Huanuni and San Jose steps are being taken to control theft. In Huanuni COMIBOL is attempting to remove from the area the cooperatives which are the principal source of theft. In addition it is installing controls over access to the river which possessors of stolen ore use in their concentration processes. Both of these measures should reduce the incidence of theft.

In San Jose much of the ore stolen from the mine is sold to the Banco Minero buying station in Oruro. On orders of President Ovando a COMIBOL representative is being placed in the buying station in order to control the ore theft.

Absenteeism has also declined since the decrees were implemented. Interior mine absenteeism dropped from 15.3% in May to 10.5% in July. Surface absenteeism dropped from 10% to 6.5% in the same period. The downward trend was still continuing in August. Within the mines second shifts are being installed gradually. In drilling operations electricity shortages rather than labor problems prevent an expansion to two or more shifts in many areas where it would be desirable. Virtually all mills are operating on three shifts according to COMIBOL.

Mine machinery is being moved freely as needed from mine to mine. COMIBOL has cited several specific examples of such movements.

COMIBOL estimates that because of aguinaldo payments strikes in the period September-December will be limited. Subversive activities of agitators are being carefully controlled in the mines.

2. Management Authority

According to COMIBOL actively worked taqueos in Catavi are gradually being reduced and discussions are taking place with the

COMIBOL has plans for replacing aged and unproductive workers with others, preferably sons in the same family, in order to increase productivity. The first steps towards this will be taken in Quechisla in September.

COMIBOL has available for use by cooperatives ten mines presently not in use. It is hoped that many of the Huanuni miners can be transferred to some of these available mining properties, which could absorb up to 2500 workers.

6. Exploration

COMIBOL is maintaining its exploration and development program at a level intended to maintain reserves at existing levels. Twenty-five diamond drills are in work; it is expected that they will match the 1964 drilling achievement of 35,000 feet. Prospection, Limited is working in the areas of (1) Caracoles, (2) Malmisa, (3) San Vicente, (4) Japo, (5) Centenario (Catavi) and (6) Lipez.