

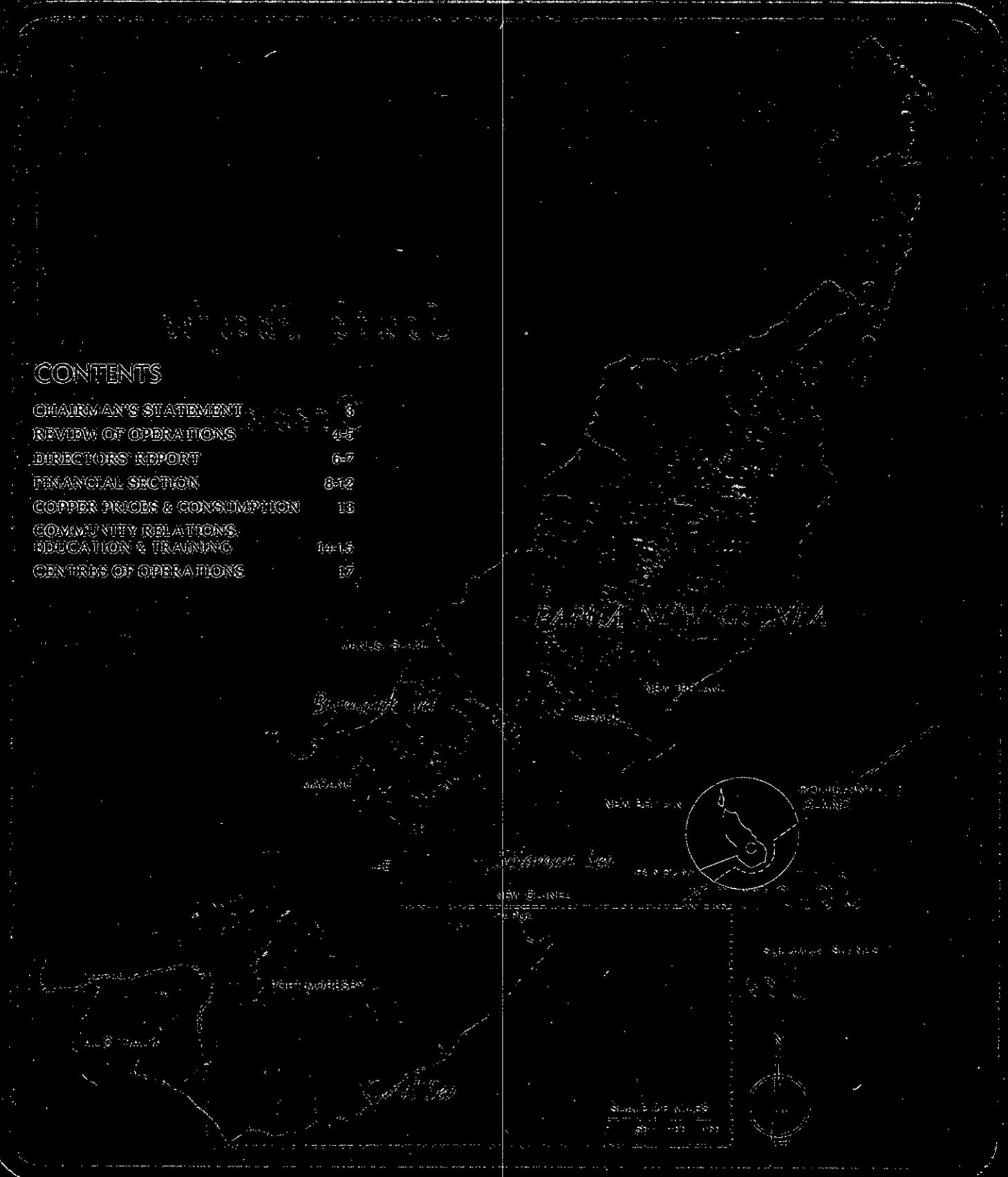
BOUGAINVILLE MINING LIMITED ANNUAL REPORT 1971



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CONTENTS

CHAIRMAN'S STATEMENT	6
REVIEW OF OPERATIONS	4-5
DIRECTORS' REPORT	6-7
FINANCIAL SECTION	8-12
COPPER PRICES & CONSUMPTION	13
COMMUNITY RELATIONS, EDUCATION & TRAINING	14-15
CENTRES OF OPERATIONS	17



Scale 1:100,000
1971



BOUGAINVILLE MINING LIMITED

(Incorporated in the Australian Capital Territory)

DIRECTORS

F. F. ESPIE, O.B.E.
(CHAIRMAN AND MANAGING DIRECTOR)

R. W. BALLMER

R. H. CARNEGIE

SIR RUPERT CLARKE, Bt., M.B.E.

SIR VAL DUNCAN, O.B.E.

SIR MAURICE MAWBY, C.B.E.

SIR MARK TURNER
(ALTERNATE J. T. RALPH)

SECRETARIES

C. J. MORCHER

R. M. HOUSTON

REGISTERED OFFICE:
75 NORTHBOURNE AVENUE, CANBERRA CITY, A.C.T.

PRINCIPAL OFFICE:
95 COLLINS STREET, MELBOURNE, VICTORIA

SHARE REGISTERS:
MELBOURNE: 111 HURVEY STREET, MELBOURNE, VICTORIA
CANBERRA: 75 NORTHBOURNE AVENUE, CANBERRA CITY, A.C.T.
PANGUNA: PANGUNA, BOUGAINVILLE ISLAND, PAPUA NEW GUINEA

STOCK EXCHANGES:
LISTED ON EXCHANGES IN ALL AUSTRALIAN
STATES AND NEW ZEALAND

NOTICE OF MEETING

THE ANNUAL GENERAL MEETING OF BOUGAINVILLE MINING LIMITED WILL BE HELD AT 11 A.M. ON FRIDAY, 7TH APRIL, 1972, ON THE 24TH FLOOR OF THE C.R.A. BUILDING, 95 COLLINS STREET, MELBOURNE.

A SEPARATE NOTICE OF THE MEETING IS ENCLOSED. ALL SHAREHOLDERS ARE CORDIALLY INVITED TO ATTEND.

ABBREVIATIONS

For convenience in reading this Annual Report, certain abbreviations have been used. These abbreviations and their respective meanings are:

"THE C.R.A. W.K.B." means the joint venture comprising Bechtel Corporation and Western Knapp Engineering (a division of Arthur C. McKee and Company) and affiliates of those organisations.

"BOUGAINVILLE COPPER" means Bougainville Copper Pty. Limited.

"BOUGAINVILLE MINING" OR "THE COMPANY" means Bougainville Mining Limited.

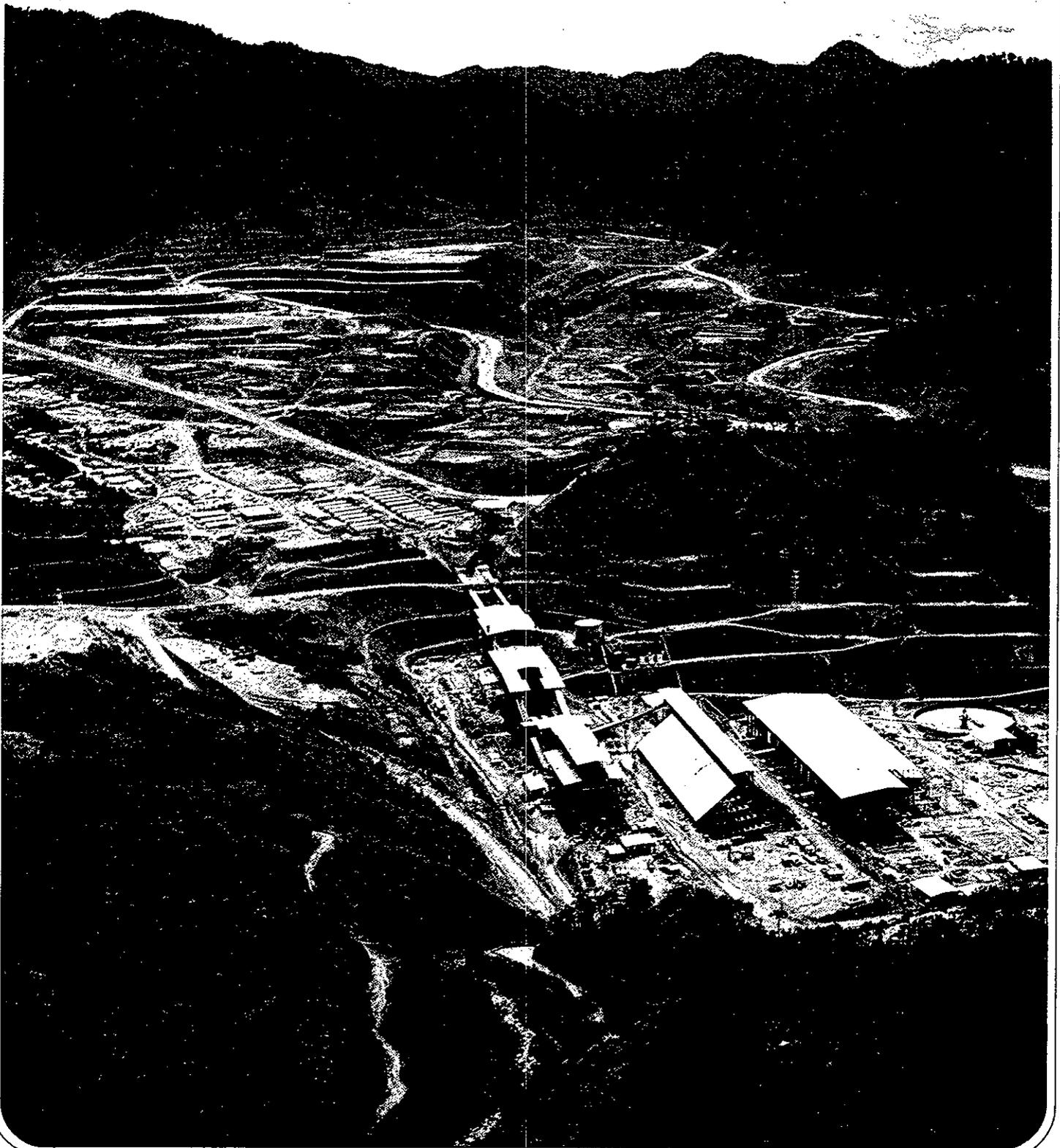
"CREDIT AGREEMENT" means the Credit Agreement dated 28th July, 1969, as amended, between Bougainville Copper, Commonwealth Trading Bank of Australia and Bank of America National Trust and Savings Association.

"P.N.G." means Papua New Guinea.

"P.D. FOUNDATION" means Pangua Development Foundation Limited.

"TONS" means long tons of 2,240 lbs. unless otherwise stated.

PANGUNA, SHOWING FINE CRUSHING AND
CONCENTRATOR AREA IN FOREGROUND
AND MINE AREA DEVELOPMENT,
DECEMBER 1971



CHAIRMAN'S STATEMENT

By the end of 1971 construction work on the Bougainville Copper project was nearing completion. The Company's 135 megawatt steam power station at Anewa Bay, essential for the testing and running of heavy machinery, was completed in November and testing of crushing and concentrating facilities commenced in December. Removal of overburden and stripping of waste rock and oxidised material was on schedule for the commencement of open-cut mining operations.

In December 1971 formal notice was given to the Japanese smelters, Norddeutsche Affinerie (Germany) and Rio Tinto Patino (Spain) under Bougainville Copper's sales contracts that commercial production of copper concentrate will commence on 1st April, 1972.

During the year buyers of copper concentrates in Japan and Europe reported that legislation requiring the introduction of anti-pollution measures and/or changes in international currency parities had affected the economics of their smelting operations. As a result of this they requested that discussions be held with a view to revising the smelting and refining terms of Bougainville Copper's sales contracts. That company agreed to hold discussions early in 1972 to determine what changes, if any, should be made to the contracts.

Subsequently, the Japanese smelters requested Bougainville Copper to consider a reduction in deliveries of copper concentrate until the end of 1973 and proposed that they hold discussions with that company on this matter. Bougainville Copper has not agreed to a reduction but discussions are taking place with the Japanese on this matter and their earlier request for alterations to their sales contract to compensate them for the installation of anti-pollution facilities and for changes in the parities of international currencies. Neither Norddeutsche Affinerie nor Rio Tinto Patino have requested any alteration in tonnages to be delivered under their contracts.

Annual production of copper concentrate is now expected to be greater than previously anticipated. Opportunities for the sale of this surplus copper are currently being investigated.

In May 1971, 18,917,073 ordinary shares of 50 cents each were offered to the public for subscription at a premium of \$1.05 per share. Of the 50,755 shareholders who were allotted shares, 9,007 were residents of Papua New Guinea.

Prior to the public share issue the Company sponsored the establishment of Panguna Development Foundation Limited to promote equity participation by indigenous residents of Papua New Guinea in the Bougainville project and service industries. In April 1971, the Company allotted 2,000,000 ordinary shares of 50 cents each to the Foundation at a premium of \$1.05 per share, paid to one cent each. Subsidiaries of the Foundation have been established to operate various commercial enterprises in which local residents of Papua New Guinea will be invited to participate.

The activities of Bougainville Copper during 1971 are outlined in more detail on pages 4 and 5 of this Report. A supplementary statement covering activities during the intervening period will be presented at the Annual Meeting of the Company.

On 31st December, 1971, Sir Maurice Mawby resigned as Chairman of the Company. I am happy to report that the Company will continue to benefit from his valuable experience as he will continue as a Director of the Company.

The Directors remain confident in the future success of the Company. The maintenance of the capital cost of bringing the mine into production at approximately \$400 million and the likely start-up of the plant some months ahead of schedule reflect the creditable performance of the construction managers, Bechtel-W.K.E., the contractors and all Bougainville employees, to all of whom the Directors express their gratitude.



F. F. ESPIE,
CHAIRMAN & MANAGING DIRECTOR.

24th February, 1972.

REVIEW OF OPERATIONS

BY MANAGING DIRECTOR
OF BOUGAINVILLE COPPER
PTY. LIMITED

Construction work on the Bougainville project during 1971 continued ahead of schedule and was nearing completion by the end of the year.

Total expenditure on mine property and capital works in progress at 31st December, 1971, was \$357 million. This was financed by shareholders' equity to the extent of \$125 million and the balance by borrowings. The estimated overall total cost of the exploration, development and construction programme remains approximately \$400 million.

ORE RESERVES: No exploratory drilling to define further ore reserves was undertaken during the year. Estimated ore reserves within the limits of the planned open pit thus remain approximately 900 million tons of ore averaging 0.48% copper and 0.36 dwt. gold per ton. When full production of copper concentrate is achieved, production of ore from the mine will be at an annual rate of approximately 28.9 million tons.

MINE DEVELOPMENT: The stripping of waste rock and overburden to expose the orebody and the establishment of mining benches and haul roads continued in 1971 and are on schedule for the commencement of open-cut mining operations. During the year under review 8,140,000 cubic yards of soft overburden and 26,700,000 tons of waste rock and oxidised material were removed. Daily production on a fully operational basis will be 80,000 tons of ore, plus waste rock. Bougainville Copper's fleet of major mine equipment now comprises five 9 $\frac{7}{8}$ inch diameter drills, six 17 cubic yard capacity electric shovels and forty-one 100 ton capacity trucks, all of which are operational.

POWER: The power station was one of the most critical items of construction to be completed during 1971. The 135 megawatt steam power station, situated near the wharf at Anewa Bay, comprises three turbine-generator units rated at 45 megawatts each. It is designed so that two of these units will be able to supply the power requirements of the mine and port areas.

Completion of the power station enabled the testing and running of heavy machinery to commence in December 1971.

TREATMENT FACILITIES: The concentrating process involves three stages of crushing, grinding and flotation. By the end of December 1971, the two 54 inch gyratory primary crushers and one half of the fine crushing and screening plants were commissioned. In addition, the installation of eight ball mills, each 18 feet in diameter and 21 feet long, which will grind the crushed material in a single stage to the size required for flotation, was completed. The flotation section, comprising two hundred and sixteen 300 cubic foot rougher flotation cells and one hundred and seventeen 100 cubic foot cleaner flotation cells, was 95% complete at the year end.

Water requirements for the concentrator have been met by building a pump station

on the Jaba River capable of supplying 30 million gallons of water daily and by laying 7 $\frac{1}{2}$ miles of 30 inch pipe.

Testing has been completed on the 5 $\frac{1}{2}$ inch diameter pipeline which will carry the concentrate in slurry form 16 miles from the mine site at Panguna to Bougainville Copper's port installation at Anewa Bay. At the port, filtering and drying facilities and covered storage of about 60,000 tons capacity were in an advanced stage of construction at the year end. It is expected that the concentrate to be shipped will contain approximately 30% copper, 1 ounce gold per ton and some silver.

During 1971, whilst the large treatment structures were under construction, strong earthquakes were recorded off the west coast of Bougainville Island. Seismic effects were felt at Panguna but no damage to any plant or buildings occurred.

PORT: The port at Anewa Bay has been dredged to provide berthing for ships up to 40,000 dead weight tons. The 250 foot wharf, which was completed in August 1970, handled 210,000 shipping tons of material and equipment required for the construction and mining programme during 1971.

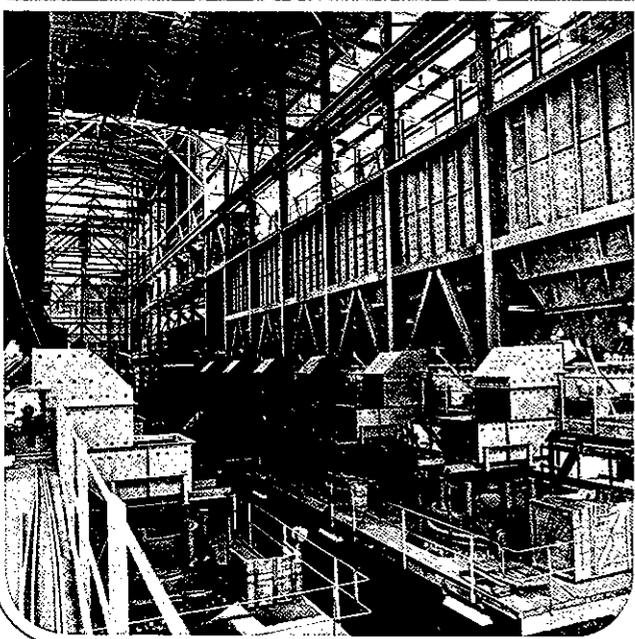
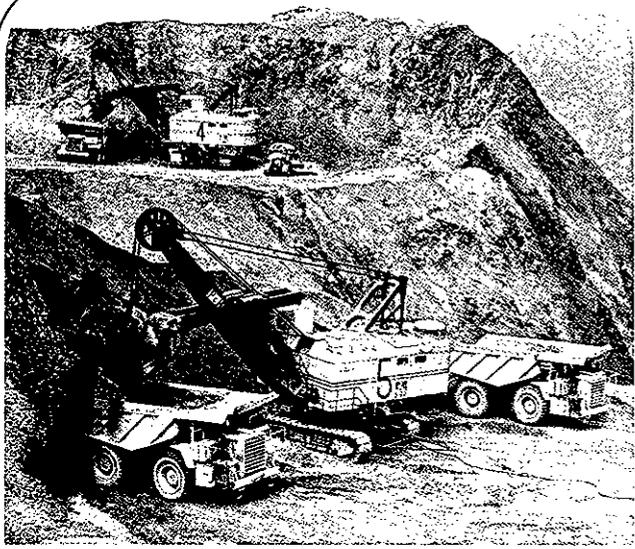
Copper concentrate will be shipped directly from storage into vessels by belt conveyor. Shipments are expected to be in quantities of up to 25,000 tons of concentrate. Erection work on the shiploader was nearing completion at the year end.

TOWNS: Because of the scarcity of flat ground at Panguna, it was necessary for Bougainville Copper to provide two residential areas to accommodate company personnel.

At Panguna 323 houses have been built and were available for occupation by employees and their families at 31st December, 1971. Other accommodation includes a number of two bedroom flats and ten three storey blocks providing quarters for single personnel.

The town of Arawa is situated on the coast some eighteen miles by road from Panguna. Bougainville Copper is developing Arawa in conjunction with the Government. Housing construction progressed satisfactorily in 1971 and 399 houses were available for occupation by company employees and their families at the end of the year. Erection of the 250 bed Arawa Hospital is nearing completion and construction is well advanced on the high school, technical college and other civic facilities.

ACCESS ROADS: The sixteen mile port-mine access road has been open to traffic since December 1970. During the year a road was constructed to provide access to the Jaba River pump station area and to facilitate the laying of the water pipeline to the concentrator. Bougainville Copper has agreed to assist the local government councils in western Bougainville to extend this road to give agricultural producers in



the Buin area of south Bougainville full road access to Panguna and the established port of Kieta.

WORKFORCE: During the year the workforce rose to over 10,000 at the peak of construction activity. Demobilisation following the completion of construction contracts reduced the figure to 7,553 at 31st December, 1971. Bougainville Copper's operational workforce is expected to be approximately 3,200 persons, of whom approximately two-thirds will be Papua New Guineans.

Training facilities were expanded during the year and a new modern training centre is nearing completion. Bougainville Copper continues to place strong emphasis on education and training of local people. Just under 2,500 persons participated in company training during the year, including 95 students sponsored to scholarships in tertiary institutions of Papua New Guinea.

MARKETING: No new sales agreements were entered into during 1971. Bougainville Copper's total sales at present aggregate 1,992,500 tons of contained copper for delivery over fifteen years. In addition, vendor's options have been negotiated to sell to Japanese smelters up to an additional 82,500 tons of contained copper over production years 6-10 inclusive. Details of Bougainville Copper's present annual contracted sales of contained copper in concentrate are as follows:

PURCHASER	ANNUAL DELIVERIES YEARS			TOTAL OVER 15 YEARS
	1-5	6-10	11-15	
JAPAN:				
Japanese smelters				
Firm sales	95,000	80,000	30,000	1,025,000
Vendor's options	—	16,500	—	82,500
	95,000	96,500	30,000	1,107,500
WESTERN GERMANY:				
Norddeutsche Affinerie	52,500	52,500	52,500	787,500
SPAIN:				
Rio Tinto Patino	15,000	15,000	6,000	180,000
Total including options	162,500	164,000	88,500	2,075,000

R. W. Ballmer R. W. Ballmer

R. W. BALLMER,
DIRECTOR

24th February, 1972.

TOP: PREPRODUCTION STRIPPING AND EXPOSING OF ORE PROCEEDED THROUGHOUT 1971. PICTURE SHOWS 100-TON TRUCKS AND 17 CU. YD. SHOVELS OPERATING AT THE 2450 AND 2500 FT LEVELS

CENTRE: BELTING ON THE COARSE ORE CONVEYORS WAS INSTALLED IN NOVEMBER 1971. THE CONVEYORS ARE NOW COVERED AGAINST EFFECTS OF HEAVY RAIN.

LEFT: INTERIOR VIEW OF THE FINE CRUSHING PLANT JUST PRIOR TO FIRST RUNNING, DECEMBER 1971.

DIRECTORS' REPORT

YOUR DIRECTORS HAVE PLEASURE IN PRESENTING THE ANNUAL REPORT AND ACCOUNTS OF THE COMPANY FOR THE YEAR ENDED 31ST DECEMBER, 1971.

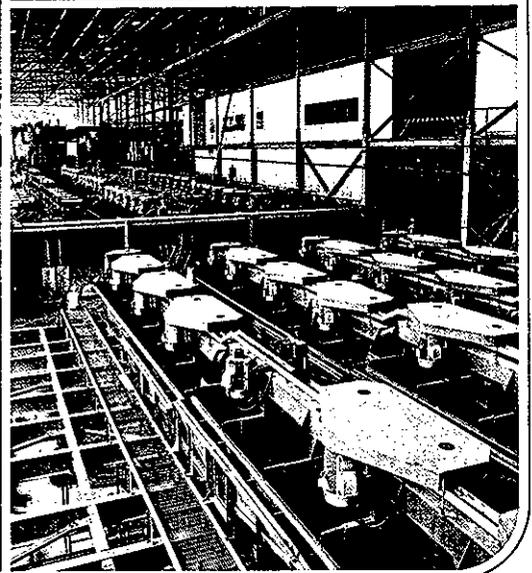
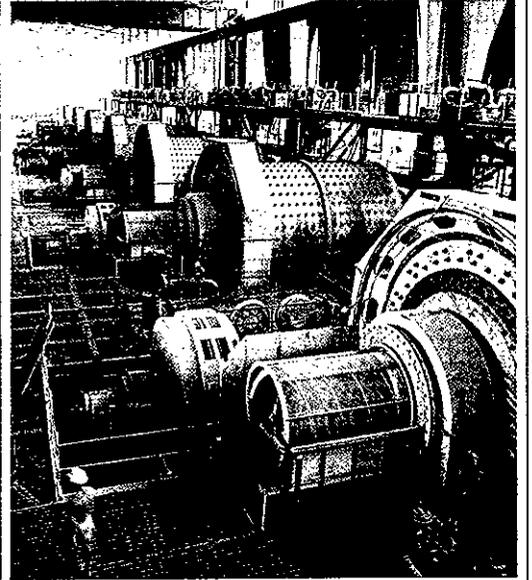
BELOW: THE CONCENTRATOR COMPLEX OF STOCKPILING, FINE CRUSHING, SCREENING, GRINDING AND FLOTATION — NEAR COMPLETION OF CONSTRUCTION, DECEMBER 1971.

RIGHT: MAIN BALL MILLS INSTALLED, OCTOBER 1971.

LOWER RIGHT: FLOTATION UNITS INSTALLED, OCTOBER 1971.

CAPITAL AND RESERVES: In February 1971 the authorised capital of the Company was subdivided into shares of 50 cents each. Each of the 77,549,276 fully paid ordinary shares of \$1.00 each either registered in the name of, or held on behalf of, Capital Mines Pty. Limited at 31st December, 1970, were simultaneously subdivided into two fully paid shares of 50 cents each. In addition, the following new shares were allotted during the year:

- In March 1971 Capital Mines Pty. Limited subscribed for 6,250 ordinary shares of 50 cents each in cash at par value;
- In April 1971 Panguna Development Foundation Limited subscribed for 2,000,000 ordinary shares of 50 cents each, at a premium of \$1.05 each, payable one cent per share on application and the balance as and when called up. These shares rank for dividends and other entitlements in proportion to the amount of capital for the time being and from time to time paid up in respect of such shares.
- In May 1971 the issued capital was further increased by the issue to the public of 18,917,073 ordinary shares of 50 cents each at a premium of \$1.05 per share. These shares were payable either in full on application, or 80 cents per



share on application and the balance on 1st December, 1971. The premium of \$19,862,927 in respect of this issue has been transferred to Share Premium Account.

- In July 1971, 2,228,125 ordinary shares of 50 cents each were allotted for cash at par value to Bamerical International Financial Corporation, a wholly-owned subsidiary of Bank of America National Trust and Savings Association, in accordance with the terms of the Fee and Option Agreement dated 28th July, 1969, between the Company, Capital Mines Pty. Limited, Bougainville Copper and Bank of America National Trust and Savings Association.

Of the shares registered in the name of Capital Mines Pty. Limited in May 1971, 4,456,250 shares were held subject to options granted to financial institutions in accordance with the terms of the Credit Agreement. These options were exercisable at par and expired on 2nd February, 1972. At 31st December, 1971, options had been exercised in respect of 2,073,715 of these shares. The remaining options were exercised prior to expiry.

During the year under review no options were granted in respect of any unissued shares of the Company.

The Company has a total of 25,601,448 shares listed on Stock Exchanges in all Australian States and in New Zealand. These comprise the 18,917,073 shares issued to the public pursuant to the Company's prospectus; the 2,228,125 shares allotted to Bamerical International Financial Corporation; and the 4,456,250 held by Capital Mines Pty. Limited in May 1971, which were subject to option agreements.

EXCHANGE FLUCTUATION: As a result of recent changes in the parities of international currencies, an unrealised gain of \$9,174,178 has arisen in respect of loan borrowings by Bougainville Copper repayable in U.S. dollars. This amount has been transferred to an Exchange Fluctuation account. It is intended that any exchange differences arising will be absorbed as profit and loss items at the time of loan repayments.

STATEMENT OF EARNINGS: Bougainville Mining earned \$169,854 from the investment of surplus funds during the year. Administration expenses totalling \$63,332 incurred during the year have been offset against this figure.

DIVIDENDS: No dividends were declared or paid during the year. In respect of future financial years, the amount of dividends that can be paid by Bougainville Copper is restricted under the Credit Agreement until the greater part of that company's secured loan borrowings is repaid. Bougainville Mining expects to pay a first interim dividend in October 1973.

LOANS: The following loans have been drawn down by Bougainville Copper and were outstanding at 31st December, 1971:

- Credit Agreement
- (a) Seven year loans totalling

US\$67.4 million, and

(b) Intermediate term loans totalling US\$55 million.

- Japanese cash loan agreement US\$30 million.
- Eximbank loan agreement US\$45.3 million.
- Japanese equipment loan agreement US\$21 million.
- Deferred payment arrangements with Australian suppliers, guaranteed by Export Payments Insurance Corporation, A\$18.4 million.
- Commonwealth Savings Bank of Australia housing loan A\$12.5 million.

With the exception of the Commonwealth Savings Bank of Australia housing loan, the deferred payment arrangements with Australian suppliers and overdraft facilities, all loans are secured by a charge over the 125,000,000 shares in Bougainville Copper registered in the names of Bougainville Mining and the Administration of Papua New Guinea. The housing loan is secured by an equitable charge over Bougainville Copper's housing leases in Arawa Township.

DIRECTORS: In accordance with Article 94 of the Company's Articles of Association Messrs. R. W. Ballmer and R. H. Carnegie retire and, being eligible, offer themselves for re-election.

AUDITORS: Messrs. Cooper Brothers & Co. retire and, being eligible, offer themselves for re-appointment.

STATUTORY: In accordance with the provisions of Section 162 of the Companies Ordinance the Directors state that in their opinion:

- 1 The results of the Company's operations in the year under review have not been materially affected by items of an abnormal character except as mentioned in this Report.
- 2 No circumstances have arisen which render adherence to the existing method of valuation of assets or liabilities of the Company misleading or inappropriate.
- 3 No contingent liabilities have been undertaken by the Company since the end of the period covered by the last Report (31st December, 1970).
- 4 No contingent liability has become enforceable or is likely to become enforceable within the succeeding period of twelve months which will materially affect the Company in its ability to meet its obligations as and when they fall due.

For and on behalf of the Board,



F. F. ESPIE,
CHAIRMAN AND MANAGING DIRECTOR.

24th February, 1972.



BOUGAINVILLE MINING LIMITED
AND SUBSIDIARY COMPANY

FINANCIAL STATEMENTS

AT 31ST DECEMBER, 1971

Notes on pages 10 and 11 form part of these statements and are to be read in conjunction therewith.

BALANCE SHEETS

	NOTES	BOUGAINVILLE MINING AND SUBSIDIARY COMPANY		BOUGAINVILLE MINING	
		1971	1970	1971	1970
		\$'000	\$'000	\$'000	\$'000
CAPITAL AND RESERVES					
Ordinary shares	1	88,145	77,549	88,145	77,549
Share premium	2	19,863	—	19,863	—
Retained earnings		56	—	56	—
FUNDS OF BOUGAINVILLE MINING SHAREHOLDERS		108,064	77,549	108,064	77,549
Funds of minority shareholder in subsidiary company		25,000	18,750	—	—
TOTAL SHAREHOLDERS' FUNDS		133,064	96,299	108,064	77,549
EXCHANGE FLUCTUATION	3	9,174	—	—	—
DEFERRED LIABILITIES (maturing later than one year)					
Secured loans	4	196,140	48,756	—	—
Equipment and other loans—unsecured	4	17,075	4,765	—	—
Provision for long service leave		121	76	—	—
		213,336	53,597	—	—
CURRENT LIABILITIES					
Bridging loan—unsecured		8,000	29,027	—	—
Creditors and accrued construction charges		21,604	3,986	10	—
Unsecured loans	4	1,295	112	—	—
Amounts due to C.R.A. group companies		166	284	54	—
Provision for income tax		51	—	51	—
		31,116	33,409	115	—
TOTAL LIABILITIES		244,452	87,006	115	—
TOTAL FUNDS USED		386,690	183,305	108,179	77,549
These funds are represented by:					
FIXED ASSETS					
Mine property and capital works in progress (at cost)	5	356,933	181,221	—	—
INVESTMENTS					
Shares in unlisted subsidiary company (at cost)	6	—	—	100,000	75,000
Unquoted shares (at cost)		45	45	—	—
CURRENT ASSETS					
Cash and bank balances		834	119	69	2
Short term deposits		15,768	448	6,325	—
Debtors and payments in advance		5,558	800	24	—
Amounts due from C.R.A. group companies		—	—	—	2,524
Amounts due on share instalments		815	—	815	—
Stocks and stores	7	5,791	649	—	—
		28,766	2,016	7,233	2,526
INTANGIBLE ASSETS					
Share issue expenses		911	—	911	—
Preliminary expenses		35	23	35	23
		946	23	946	23
TOTAL ASSETS		386,690	183,305	108,179	77,549

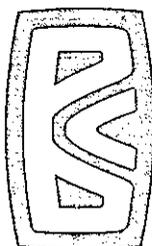
STATEMENT OF EARNINGS

	BOUGAINVILLE MINING	
	1971 \$'000	1970 \$'000
INTEREST EARNED ON SHORT TERM DEPOSITS	170	—
<i>Less:</i>		
ADMINISTRATION EXPENSES	63	—
PROFIT BEFORE TAXATION	107	—
<i>Less:</i>		
PROVISION FOR TAXATION	51	—
UNAPPROPRIATED EARNINGS CARRIED FORWARD	56	—

The Company's 80%-owned subsidiary, Bougainville Copper Pty. Limited (incorporated in Papua New Guinea), did not trade in the period from the date of its incorporation (2nd June, 1967) to 31st December, 1971. Accordingly no consolidated Statement of Earnings is presented. During this period Bougainville Copper carried out developmental and constructional work and all expenditure was capitalised. In respect of expenditure incurred by that company during 1971 audit fees of \$20,000 (1970 \$16,000) and interest on fixed term loans totalling \$13,903,620 (1970 \$3,965,172) were capitalised.

Audit fees of \$600 are included in the administration expenses charged against income by Bougainville Mining during 1971. Further audit fees of \$19,600 relating to the public share issue have been included in "Share issue expenses".

No directors' fees have been incurred or paid and no depreciation has been charged on any assets in respect of the year ended 31st December, 1971, by either Bougainville Mining or Bougainville Copper.



NOTES ON ACCOUNTS

1 CAPITAL

The authorised capital of 90,000,000 ordinary shares of \$1.00 each was subdivided into ordinary shares of 50 cents each by a resolution of shareholders dated 15th February, 1971.

Movements in issued capital during 1971 were:

	Ordinary Shares of 50 cents each	
	Number	Paid-up Capital
Issued at 31st December, 1970	155,098,552	\$ 77,549,276
Issued during 1971:		
At par (fully paid)	2,234,375	1,117,187
At a premium of \$1.05 per share		
° fully paid	18,917,073	9,458,537
° paid to one cent each	2,000,000	20,000
	178,250,000	\$88,145,000

2 RESERVES

The transfer of \$19,862,927 to Share Premium Account comprises the premium of \$1.05 per share on the public share issue of 18,917,073 fully paid ordinary shares of 50 cents each.

3 EXCHANGE FLUCTUATION: CURRENCY CONVERSION

Previously loans were converted at the rates of exchange prevailing at the date of each transaction. Following the realignment of exchange rates for foreign currencies in 1971, loans have now been converted at the rate of exchange prevailing at the date of the Balance Sheet. The unrealised gain of \$9,174,178 has been credited to an Exchange Fluctuation account and it is intended that any exchange differences will be absorbed as profit or loss items at the time of loan repayments. All other amounts have been converted at the rate of exchange prevailing at the date of each transaction.

4 LOANS

° SECURED

A. The following secured loans are repayable in U.S. dollars and are secured by a charge over the 125,000,000 shares in Bougainville Copper registered in the names of Bougainville Mining and the Administration of Papua New Guinea. The loan repayment dates are subject to certain provisions relating to prepayments and deferrals.

	Repayable between	1971		1970	
		US\$	A\$	US\$	A\$
a) Credit Agreement					
Seven year loans	1978	67,400,000	56,591,100	—	—
Intermediate term loans	1973-1976	55,000,000	46,179,681	—	—
b) Japanese cash loans	1973-1979	30,000,000	25,188,917	20,000,000	17,879,492
c) Eximbank loans	1973-1978	45,280,799	38,019,143	25,661,724	23,009,041
d) Japanese equipment loans	1973-1982	21,034,539	17,661,242	8,786,175	7,867,684
		218,715,338	183,640,083	54,447,899	48,756,217

Annual interest rates on the above loans during 1971 varied between 6% and approximately 11%.

B. Commonwealth Savings Bank of Australia Housing Loan:

A\$12.5 million has been drawn down under this loan which is secured by an equitable charge over Bougainville Copper's housing leases in Arawa Township. Interest payments are at the rate of 8% per annum. Repayments are to be made over years 1974-1979.

° UNSECURED

Bougainville Copper has entered into deferred payment arrangements with Australian suppliers of goods and services. Repayments are to be made over years 1972-1982.

5 MINE PROPERTY AND CAPITAL WORKS IN PROGRESS

Included under this heading are audit fees of \$20,000 and interest payments of \$13,903,620 paid or to be paid by Bougainville Copper in respect of 1971.

6 INVESTMENTS

The 100,000,000 fully paid shares of \$1.00 each held by Bougainville Mining in Bougainville Copper are subject to a charge securing loans made to Bougainville Copper (see Note 4).

7 STOCKS AND STORES

Stocks and stores are stated at the lowest of cost, realisable value and replacement price.

8 COMMITMENTS

Capital commitments not reflected in the accounts total approximately \$8,505,000 (1970 \$81,500,000).

DECLARATIONS

DECLARATION BY SECRETARY

I, Christopher John Morcher, Secretary of Bougainville Mining Limited, do solemnly and sincerely declare that the accompanying balance sheets and statement of earnings of the Company are, to the best of my knowledge and belief, correct. And I make this solemn declaration by virtue of the Statutory Declarations Act 1959, and subject to the penalties provided by that Act for the making of false statements in statutory declarations conscientiously believing the statements contained in this declaration to be true in every particular.

C. J. MORCHER

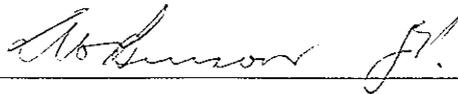
Secretary

Declared at Melbourne in the State of Victoria this 24th day of February, 1972.

Before me:

D. M. BENSON

Justice of the Peace



REPORT OF THE AUDITORS TO THE MEMBERS

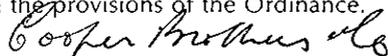
In our opinion, the balance sheets and statement of earnings set out on pages 8 and 9 are properly drawn up in accordance with the provisions of the Companies Ordinance 1962-1968, and so as to give a true and fair view of the state of affairs and the earnings of the Company and of the Group.

The accounting and other records, including registers, examined by us have, in our opinion, been properly kept in accordance with the provisions of the Ordinance.

COOPER BROTHERS & CO.

Chartered Accountants

MELBOURNE. 24th February, 1972.



STATEMENT BY DIRECTORS

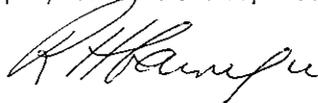
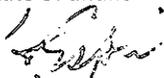
In the opinion of the Directors of Bougainville Mining Limited the accompanying statement of earnings is drawn up so as to give a true and fair view of the results of the business of the Company for the period covered by the statement and the accompanying balance sheet is drawn up so as to exhibit a true and fair view of the state of affairs of the Company at the end of that period.

On behalf of the Board,

F. F. ESPIE, R. H. CARNEGIE

Directors

Signed at Melbourne this 24th day of February, 1972.



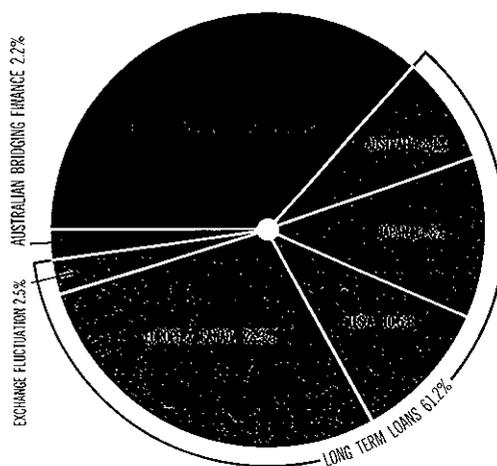
CONSOLIDATED SOURCE AND APPLICATION OF FUNDS

Period from incorporation of Bougainville Mining (20th June, 1969) to 31st December, 1971

SOURCE OF FUNDS

\$A million

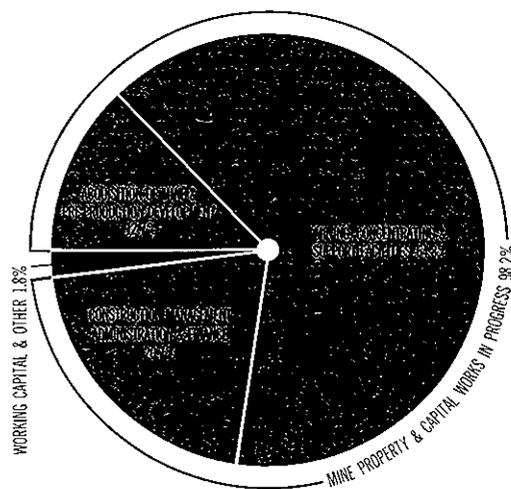
SHARE CAPITAL & RESERVES	133.1
LONG TERM LOANS:	
◦ AUSTRALIA	29.6
◦ JAPAN	42.8
◦ U.S.A.	38.0
◦ EUROPE & CANADA	102.8
◦ EXCHANGE FLUCTUATION	9.2
	<u>222.4</u>
AUSTRALIAN BRIDGING FINANCE	8.0
	<u><u>363.5</u></u>



APPLICATION OF FUNDS

MINE PROPERTY & CAPITAL WORKS IN PROGRESS:

◦ ACQUISITION OF MINE & PRE-PRODUCTION DEVELOPMENT	46.2
◦ MINING, CONCENTRATING & SUPPORT FACILITIES	235.3
◦ CONSTRUCTION MANAGEMENT, ADMINISTRATION & FINANCE	75.4
	<u>356.9</u>
WORKING CAPITAL & OTHER	6.6
	<u><u>363.5</u></u>



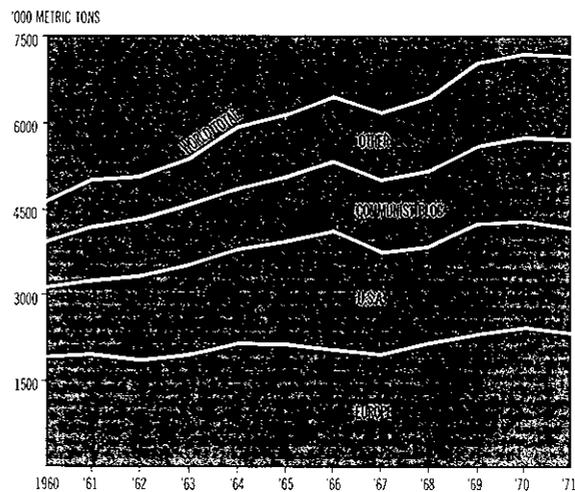
COPPER PRICES AND CONSUMPTION

As the Company's profitability will be largely dependent upon world copper prices, the following graphs have been incorporated in this report for the information of shareholders.

During the period covered by the graph on the world consumption of refined copper, the average annual increase in the rate of consumption has been approximately 4%. The world export trade in copper ores and concentrates increased from 268,000 metric tons of contained copper in 1963 to an estimated 590,000 metric tons of contained copper in 1971, an average annual increase of 10%.

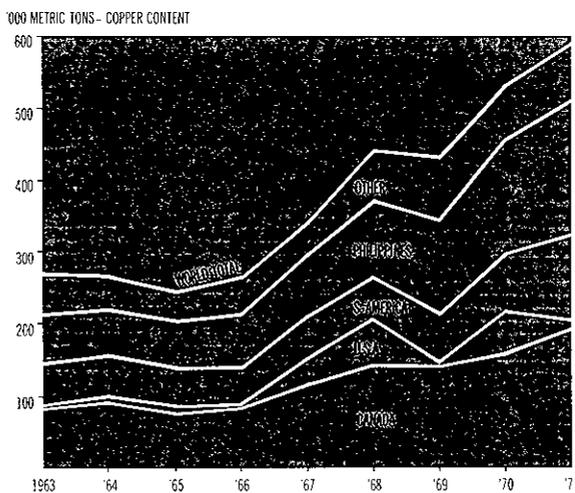
Under existing contracts Bougainville concentrates will be sold on the basis of ruling market rates for payable copper, gold and silver contained in the delivered concentrate, less refining and smelting charges, deductions for impurities and excessive moisture content and freight charges in respect of sales to European buyers. The ruling market rate for payable copper in respect of Bougainville concentrates is at present the same as the official London Metal Exchange cash seller's price for electrolytic copper wirebars.

As may be seen from the graph on copper metal prices, copper prices have fluctuated markedly over the past few years. During 1971 the daily range of official London Metal Exchange daily cash copper wirebar quotations fluctuated between a high of £536 (sterling) per metric ton and a low of £393 (sterling) per metric ton. The average price for daily cash copper wirebar quotations for 1971 was £444 (sterling) per metric ton.



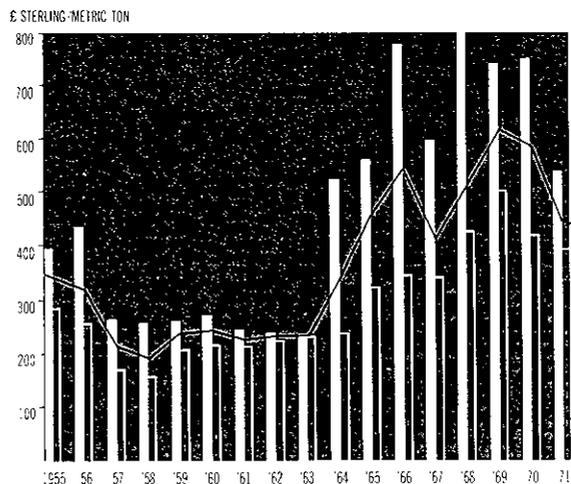
WORLD CONSUMPTION OF REFINED COPPER 1960-1971

(Source — World Bureau of Metal Statistics — 1971 estimated.)



WORLD EXPORT TRADE IN COPPER ORES & CONCENTRATES 1963-1971

(Source — World Bureau of Metal Statistics — 1971 estimated. Figures prior to 1963 not available.)



COPPER METAL PRICES 1955-1971

Annual Range of Official London Metal Exchange Daily Cash Copper Wirebar Quotations and Annual Average Quotations (Source: London Metal Exchange.)

ANNUAL AVERAGE QUOTATIONS

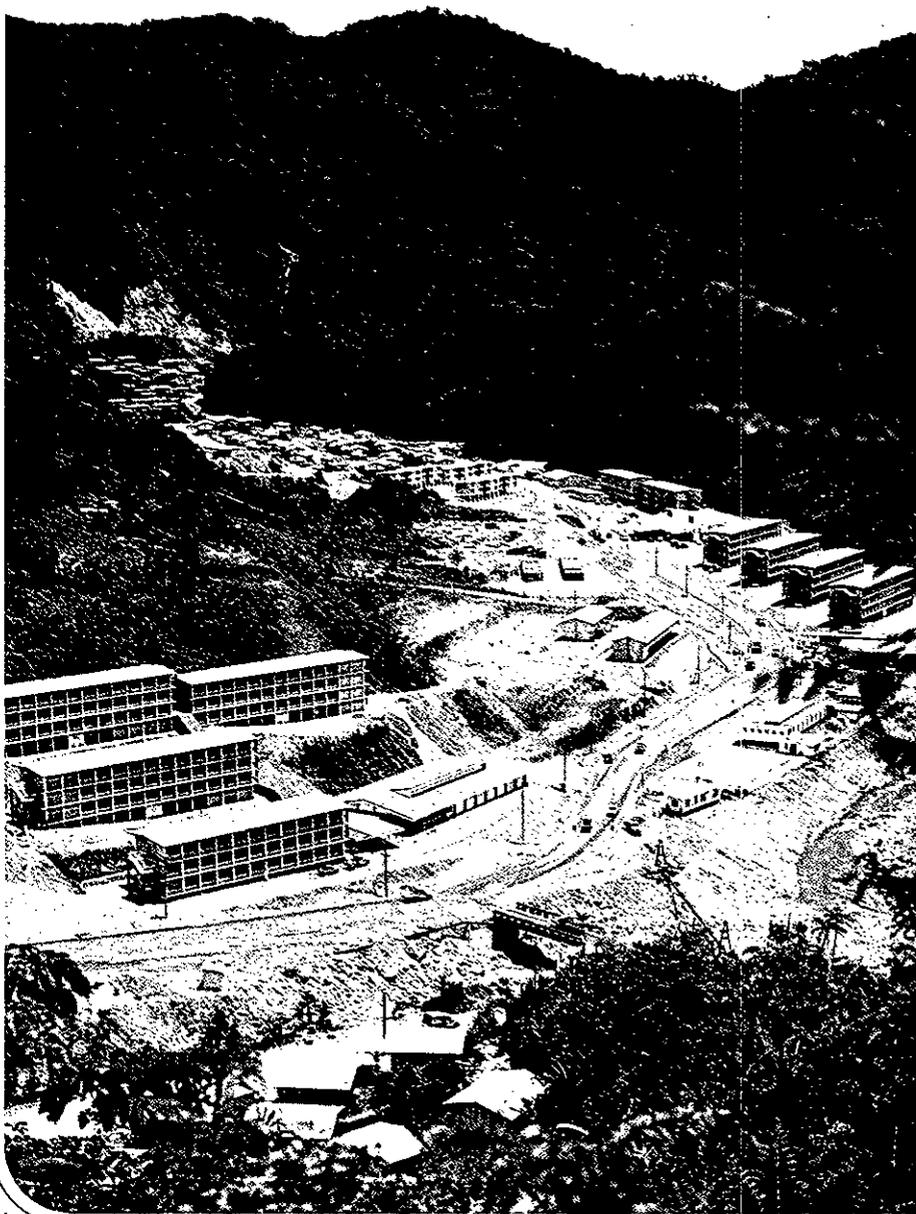
COMMUNITY RELATIONS, EDUCATION AND TRAINING

Bougainville Copper gives special attention to social and community aspects on Bougainville and aims to maximise benefits for the local inhabitants and the emerging nation of Papua New Guinea. Policies are firm on integration, localisation and education and extend to other non-mining activities such as encouragement of local business enterprise, purchasing of local produce and attending promptly to problems of relocation and compensation.

BELOW. THE KAWLRONG VALLEY PORTION OF PANGUNA TOWNSHIP, SHOWING THE SCARCITY OF FLAT LAND IN THE AREA.

RIGHT. KAROONA MARKET, PANGUNA, WHERE GROWERS FROM A WIDE AREA SELL THEIR PRODUCE TO PANGUNA RESIDENTS.

LOWER RIGHT. TRAINING AND EDUCATION OF INDIGENOUS PERSONNEL ARE IMPORTANT FACTORS IN IMPLEMENTING THE COMPANY'S POLICY OF LOCALISATION OF THE WORKFORCE. A TRAINEE SURVEYOR AT THE PANGUNA MINESITE.



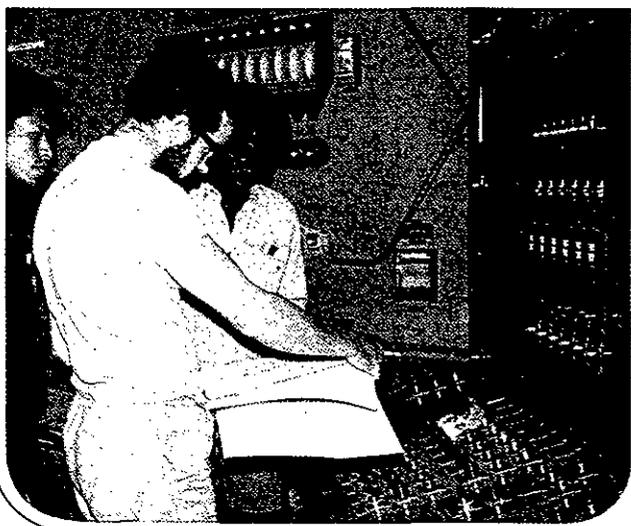
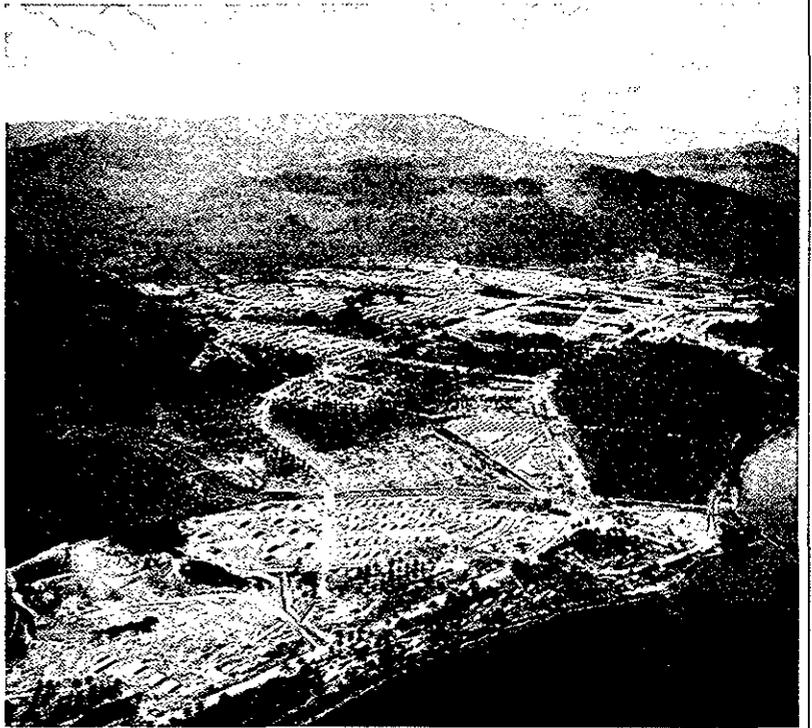
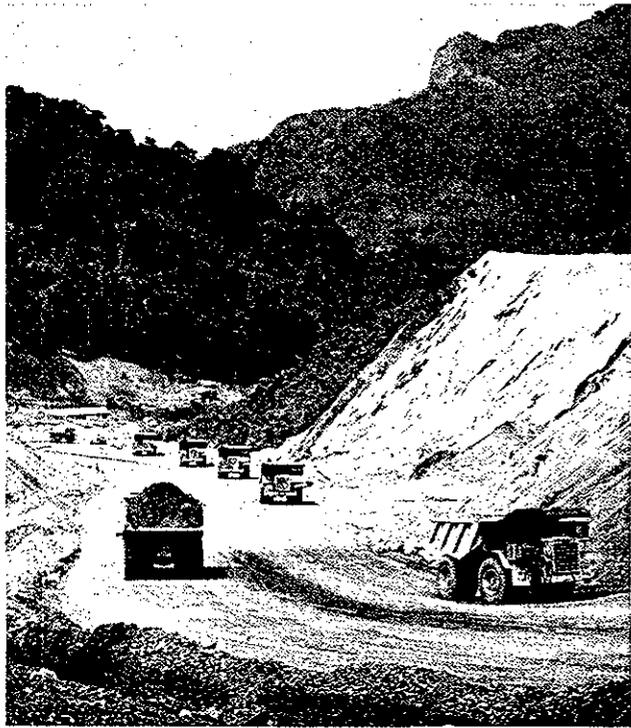


LEFT: A COMPANY WELFARE OFFICER AND "CLASS" AT PANGUNA

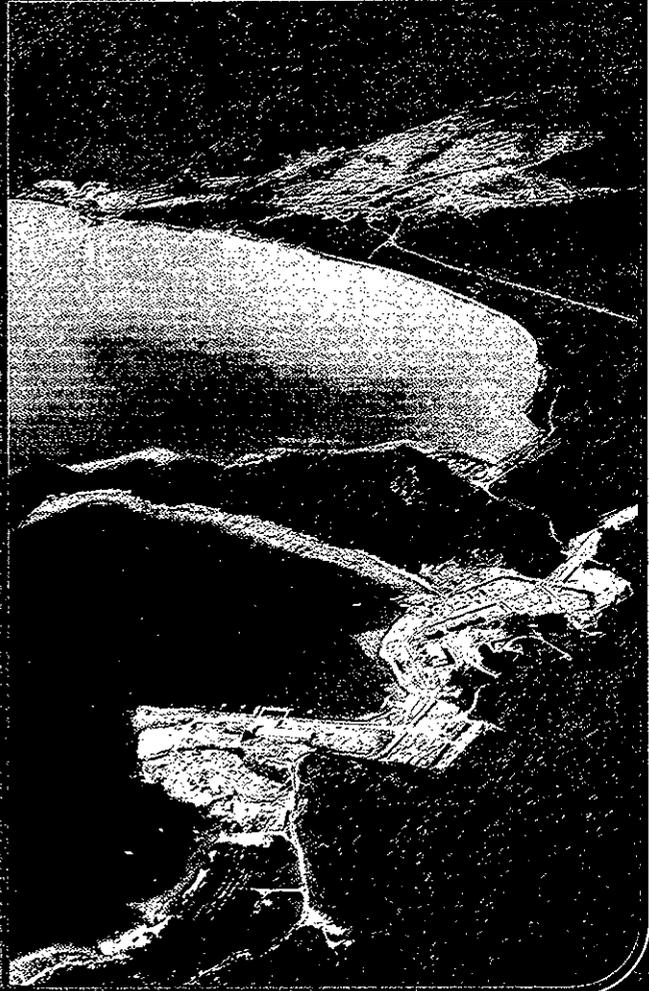
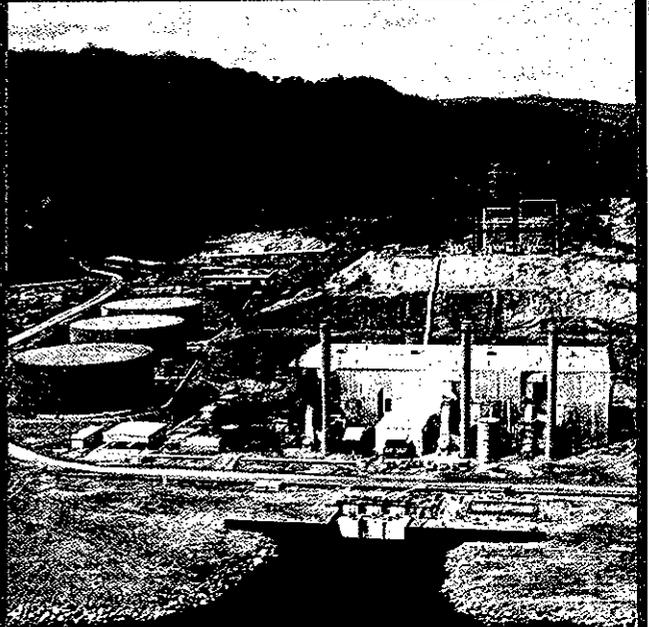
CENTRE LEFT: BOUGAINVILLE COPPER'S FLEET OF EUCLID 100-TON TRUCKS IS MANNED BY INDIGENOUS DRIVERS TRAINED AT PANGUNA

LOWER LEFT: TRAINEES UNDER INSTRUCTION IN THE CONTROL ROOM OF THE HIGHLY AUTOMATED FINE CRUSHING PLANT.

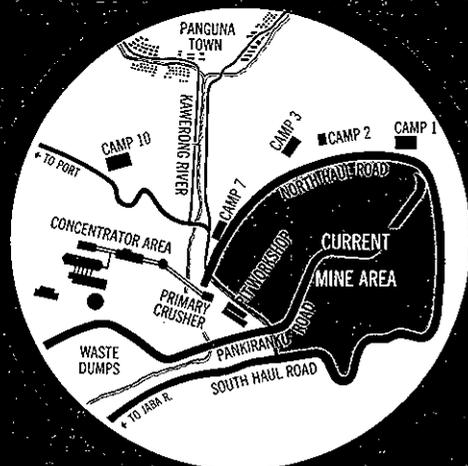
BELOW: ARAWA TOWN, DECEMBER 1971



BELOW: MOUNTAIN SECTION OF THE
16-MILE PORT-TO-LINE ACCESS ROAD.
RIGHT: DOUGANVILLE COPPER'S 135-MW
POWER STATION AT ANEWABAY.
COMPLETED IN NOVEMBER 1971, FUEL TANKS
ARE AT LEFT.
LOWER RIGHT: THE COMPANY PORT AT
ANEWABAY. THE TOWN OF ARAWA IS ALSO
SHOWN.



CENTRES OF OPERATIONS



PANGUNA: Site of Bougainville Copper's open-cut mine, crushing and concentrating facilities and location of Panguna township. Situated in a mountain valley 16 miles, by road, from the east coast of Bougainville Island. Reached by a 24-ft. wide all-weather highway which crosses the Crown Prince Range at 3400 ft. and descends to the valley level of 2000 ft.

ARAWA: A new town being developed jointly by Bougainville Copper and the Administration of Papua New Guinea. Situated on the east coast about seven miles from the town of Krieta, four miles from the company port of Anewa Bay and 18 miles from Panguna. Arawa will be Bougainville's biggest town and will have full community facilities. Initial planning is for a population of over 8000.

ANEWA BAY: location of Bougainville Copper's port and its 135 MW power station. Port facilities include wharf, shiploader, filtering and drying plants and covered storage for copper concentrates prior to shipment.

JABA RIVER: Flows from the Crown Prince Range to Empress Augusta Bay on the west coast of Bougainville Island. Pump stations for provision of water to the concentrator are situated at the junction of the Jaba and Kawerong Rivers, 7½ miles from Panguna. The 30" water pipeline is under the access road.



BOUGAINVILLE MINING LIMITED ANNUAL REPORT 1971

