

Bougainville Copper Concentrates

VOLUME THREE / NUMBER SEVEN APRIL, 1973

Bougainville Copper has introduced a computer prepared payroll system using the services of International Computers Limited in Port Moresby. All sections of the company are being phased onto the system.

Briefly the system operates as follows:-

Addressograph plates are prepared for each employee. These are used to head up individual fortnightly time sheets. Each employee receives a copy of the time sheet at the close of the pay week.

Each Monday, time sheets are submitted to the Pay Office at 7.30 a.m. and these are checked and coded by the

(Continued next page)



Picture shows Josephine Zielonka, punch tape operator, with Augustine Davin, assistant paymaster, holding computer prepared envelopes, and Arua Henao, payroll data supervisor, with paper tape which is transmitted by telex to Port Moresby.

toktok

Many, many years before white men arrived in Papua, there was a big village called Avai between Beipa'a and Bereina with about 600 population. These Avai people had their own language.

The Avai chief wanted the land of Bereina and East Mekeo people to give to his 600 people. So he declared war on them. He gathered all his young men together and split them into two groups to fight the Bereinas and East Mekeos. They collected their spears and bows and arrows and fighting sticks and attacked the two peoples.

But the war was hard and long and no side could win. So the Avai chief called his people home for a two day rest. Next day, early in the morning, the Avai warriors made a big fire in the middle of the village and stood around it discussing how to kill those enemies of theirs.

Just then they all heard some birds in a tall tree near the village singing a very sad song. These birds were "olivaula", something like magpies. The warriors looked up and some thought the birds were singing from their bottoms and others thought they were singing from their mouths.

They began to argue whether the birds were singing from their bottoms or their mouths. They split into two groups and began abusing each other. Then they began to fight and in their conflict they burnt down their own village.

They therefore took their families and left Avai and went to other Mekeo villages and the chiefs of those villages welcomed those fighting men of Avai. The chiefs gave them homes and land. Nowadays these Avai people are still living in various villages other than their own. They have also lost their language although they still call themselves Avais. My village is called A'peana in Mekeo and we have Avai people living with us. They assure us that this is a true story.

- BENEDICT KAVO,
Community Relations senior clerk.

payroll officers. They are then processed by the accounting machine section who punch the coded information onto paper tape.

The paper tape is then fed into a telex machine and the information transmitted on the telegraph line via Lae to I.C.L.'s office in Waigarni Drive, Port Moresby. The telex at I.C.L. reproduces the paper tape that is fed into the B.C.P. machine.

On Monday night I.C.L. feed the paper tape, produced by their telex, directly into their computer which calculates the pays, prints the pay envelopes, prepares costing information and maintains records of each employee's earnings.

On Tuesday all this payroll information is flown to Kieta.

Employees who are currently being paid by the system will have observed the following advantages over the manual pay system:

- The copy of the time sheet allows each employee to check his hours well before his pay is received.
- The tear-off portion of the time sheet which the employee signs allows pay to be distributed more quickly with less delay.
- The new pay envelope has printed inside it very comprehensive details of each employee's pay and enables him to carefully check its accuracy.
- The rigid controls of the computer system virtually eliminate errors of calculation and so the accuracy of the pay has been substantially improved.



LOCATION B99		COMPANY Bougainville Copper Pty Ltd	
EMPLOYEE NAME Bloggs J.		EMPLOYEE NUMBER 89863	PERIOD ENDED 14-4-73
DESCRIPTION		ALLOWANCES	DEDUCTIONS
	HOURS	RATE	AMOUNT
Ordinary Pay	80.00	0.20000	16.00
Overtime A	2.30		0.75
Overtime B	6.00		2.40
Other Time	24.48		4.96
Tax			0.51
Accom			4.00
* -- RATE DIFFERENT FROM STANDARD		GROSS PAY 24.11	TOTAL DEDUCTIONS 4.51



PAY-COST
SERVICE

NET PAY

19.60

PAY
ENVELOPE
ADVICE

Left, a typical pay envelope. Above that, coded information of the same employee's time sheet.

The pay envelope identity number, 8986, is followed by a 3; this is a check digit number which allows the tape punch to verify if the identity number is valid. Hours on the pay envelope are worked out to hours and minutes not fractions. Overtime A is time and a half; overtime B is double time; other time is equivalent hours in relation to shift work.

sports news

Well the BOXING is on again and our first night at Loloho was quite a good one for a "first night".

Most of the regulars turned up and a lot of new faces donned the gloves for the first time. It is intended to hold these boxing nights each fortnight - alternating between Panguna and Loloho as we did last year.

A team of at least 7 will be coming up from Honiara on April 18 and fighting our boys on the 20th. They will then return to Honiara the next day. The boxing night will be held at Panguna so I would like to see a full house for this night. Watch for advertising.

The RUGBY pre season competition is under way and from the enthusiasm shown by teams we are in for a really good season.

Teams for this season in this years competition are as follows:

"A" Division

Barbarians (Kieta)
Brothers (Highlanders)
Hiri/PDF
Tura (Barclays)
Engineering
United (Central)
Kumul
Police
Marshall Lagoon
Muruks (Apprentices)

"B" Division

Barbarians
Brothers
Hiri/PDF
Tura
Engineering
United
Kumul
Marshall Lagoon

AUSTRALIAN RULES teams are all in training but under great difficulties as is the Rugby teams, due to lack of grounds but the way our ground alterations are progressing it won't be too long before we can use it. BUT until all the grass is fully grown everyone is requested to keep well off the ground. If we don't give the ground a go and keep off it we just won't have a ground. All team managers are requested to help by instructing their teams to abide by this request.

The CRICKET competition finished on March 18, and after an exciting last few games the final is to be played between Panguna Colts and Kieta. The Colts had to win against Loloho as Kieta claimed a forfeit against Panguna for the last game of the season when Panguna turned up late. The Colts not to be thwarted, beat Loloho quite easily and my prediction about this team proved correct. Kieta won't have things all their own way in the final as the Colts are really playing well.

Scores: Loloho : 71 - Udu Gamu
13 overs 6/30

Colts : 132 - Hurrell - 25
Dikina Boge - 47
Stewart - 21
Nelson - 19

The Coast Sport and Social Club now has its committee which was elected after a meeting. (64 turned up). BCP Management have come to the party and approval has been given for the issue of all materials required to renovate the building. Noel Everon, Vic Caruana and others have been working hard and plans for the renovation have been drawn up and no doubt by the time you are reading this, work will have been well underway.

I hope to be able to fill you in with the rules for joining the Club etc. in our next issue but the main thing is that the Coast Sport and Social Club is now a reality.

The BASKETBALL competition is to commence this week. 12 teams have entered and it is intended to play

some games at Loloho and some here in Panguna. Ken Delaney from the Panguna Supermarket is the man in the chair and is really putting in a lot of work to ensure this competition is a goer. Keep up the good work Ken! I will publish scores etc. each issue. A BCP team has entered the Kieta comp. again with Robert Phillips as Captain/Coach.

The Kieta Sailing and Cruising Club season is in full swing now with races each Sunday. The number of yachts that compete is very gratifying. We are also getting more and more "fizz" boats in the club. Wander down one Sunday and see the activity for yourself.

SOCCER is all the rage at Rigu each Sunday and trial matches are in progress. From my observations I don't envy the Soccer Association's job of sorting all the teams out and making sure all teams finish the season. BCP is well represented.

- RON HERRICK



Scene from the cricket.

films

PANGUNA

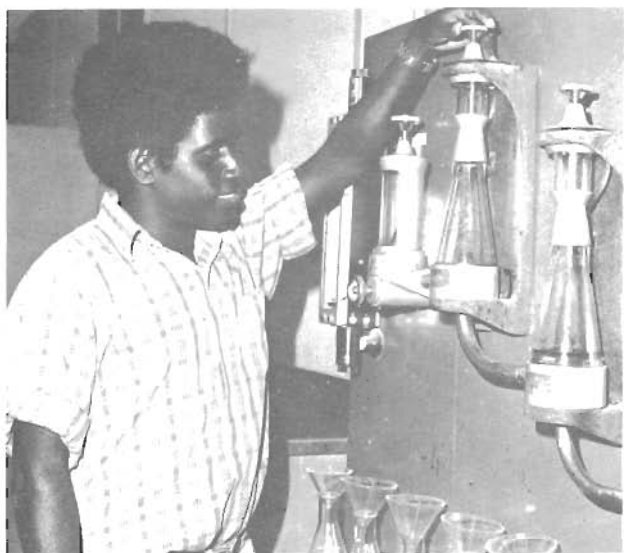
Thurs. & Fri. April 5 & 6	Only Game in Town	Elizabeth Taylor Warren Beatty
Sat. & Mon. April 7 & 9	Five Card Stud	Dean Martin Robert Mitchum
Sun. & Tues. April 8 & 10	The Good, The Bad & the Ugly	Clint Eastwood
Thurs. & Fri. April 12 & 13	How to Steal a Million	
Sat. & Mon. April 14 & 16	Oh What a Lovely War	Huge cast of top stars.
Sun. & Tues. April 15 & 17	Hang Em High	Clint Eastwood Inger Stevens

ARAWA

Friday April 6	Fitzwilly	Dick Van Dyke
Sunday April 8	Fortune Cookie	Jack Lemmon Walter Matthau
Wednesday April 11	Only Game In Town	Elizabeth Taylor Warren Beatty
Friday April 13	Mutiny on the Bounty	Marlon Brando Trevor Howard
Sunday April 15	Five Card Stud	Dean Martin Robert Mitchum
Wednesday April 18	How to Steal a Million	

people

Below, (from the left) at work with microscopes in the minegraphic laboratory, concentrator, are Megadne Kahento, lab assistant and Tom Bates, lab apprentice. Middle, working in the sample preparation room are Andrew Bintamoi, lab assistant and Jacob Mariaraha, assay sampler. Bottom, at work in the atomic absorption laboratory are Peter Vaneau, lab assistant and Celsus Geleilo, lab apprentice.



our primary schools

Arawa and Panguna are well served in primary schools and in the general area there are also primary schools at Sipatako, Tunuru, Bairima, Rumba, Piruana, Deomori and Keuru.

Arawa has two primary schools - Tupukas on the banks of the Tupukas River and Bovo on the banks of the Bovo River. Tupukas, three years old, has more than 400 children enrolled. It takes both European and indigenous children - European children do the Australian curriculum and indigenous children the Papua New Guinean syllabus.

There are various areas, however, where both children amalgamate under either a European teacher or indigenous teacher. All girls learn to do things like sewing together as part of community relations. The school has eight expat teachers and seven Papua New Guinean.

According to Geoff O'Reilly, head master, the school has developed greatly in each of its three years since 1971. One of its annual events, encouraging friendly relations among the town and the surrounding village people is the Arawa Family Fair. The school has an active P. & C. Association made up of both European and indigenous parents and friends. Many parents assist in school projects.

In the near future a large assembly hall will be erected. It is anticipated that much of this work will be done on a voluntary basis.

The Bovo Primary school began operating in 1972 and at present takes 150 children, all but two being Europeans. There are also a number of mixed-race children in the school. Ray Hopkins is the head master and he has five other teachers on the staff, all expats. Due to a very low indigenous population in the area the school is presently following the Australian curriculum but will take in the PNG syllabus in the near future as soon as enough local children are available.

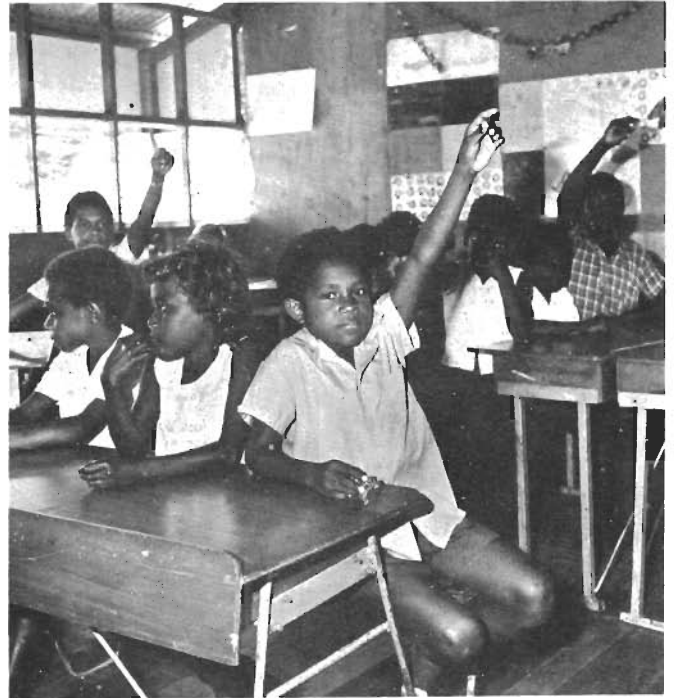
It has one local parent on its board of management. The school's playground equipment was supplied by Bougainville Copper. Other things like books for its up-to-date library are donations from the various organisations in the town. The Administration provided the school with a subsidy of \$100 towards this library last year.

The school, however, still needs a lot of equipment. To meet this demand the children run a successful canteen in the school. Already, some \$500 has been spent on levelling the school grounds.

Panguna primary school was opened with 22 children and two teachers in 1970 and caters for BCP employee's children together with the children from the nearby Moroni village. Of this year's enrollment of 200, 00 are Papua New Guinean children, all doing the Australian curriculum. Adrian Gregory has been in charge of the school ever since its opening and this year he has a staff of six expatriate teachers.

Mr. Gregory said that the PNG syllabus would be introduced a little later and there would be some local teachers on the staff then. The school is very proud and grateful for its active P. & C. Association which looks after very effectively a lot of the school's property like its up-to-date and air-conditioned library. Panguna Lions Club is a great help to the school. Some of its projects have been painting of the buildings and donating a piano.

- JOHN PIPPIN



Top, Tupukas children know the answers; above, Panguna primary school children play tennis during recreation period. Below, Bovo children hard at study.



JUST A LOT OF WIND!

The statement in a previous issue of Concentrates that a record wind measurement of 209.86 miles/day occurred at Panguna during the May/June cyclone of last year has apparently confused some readers (including some CRA staff in Melbourne) - although, of course, as applies to all information issued in Concentrates, it was perfectly correct.

The difficulty probably arose because in reference to cyclones or strong winds, most people expect to read the maximum speed of the wind gusts that occurred, whereas the figure quoted in Concentrates was not a gust speed at all. Although instruments to record wind gusts are available they have certain disadvantages and their use is generally restricted to the larger meteorological stations. The more common wind measuring instrument is the cup anemometer. This instrument measures the "run of the wind" on a counter in a similar fashion to the mileometer in a car. The average speed of the wind, if required, can be obtained from this instrument by dividing the distance run by the time interval between successive readings of the counter. Obviously only if the readings are taken at very short time intervals can this instrument be used to give gust speeds. When readings are only taken daily the wind measurement is usually given as miles/day, as was quoted in Concentrates.

This latter type of instrument was chosen by BCP because the company anticipated that wind speeds would be low and would not be a major design hazard. This has been generally true and average wind speeds at Panguna have been less than a quarter of those experienced in Melbourne or Sydney.

The "record" wind measurement of 209.86 miles per day quoted in Concentrates may not be high by Australian standards but was the correct miles of wind run during the windiest 24 hour period of the cyclone and therefore of the year. It can of course be converted to give an equivalent average wind speed for the 24 hours of 11.24 m.p.h. or 10.49 ft/sec or 18.09 km/hour.

- RICHARD CLARK
Field Research Engineer

STORK CLUB

Baby sons for Martha and Peter Daniel and Mary and Peter Hangat. Peter Daniel is a trainee extension officer, ambulances and Peter Hangat works in the pit workshop.

A son also for Dora and Alpius Pisa at Sohano Hospital, Buka Passage. Alpius, an issues section storeman, named his son Datsun Karahe after senior storeman Don Datson.

COLUMN THREE

On March 7, there was a Board of Directors meeting. A cocktail party was held for the directors and guests at the guest house annexe in the evening.

On March 8, Miss Monique Esnard, Red Cross Advisor from Geneva, was on site. She was accompanied by Miss M. White from Red Cross, Port Moresby, and Mr. S. arere, Red Cross, Rabaul. Miss Esnard conducted a meeting in the industrial relations conference room.

On March 9, we were visited by nine American tourists plus seven crew off the 'Korea Bear'.

SILLY SEASON IN MELBOURNE

We'd always thought that spring was a silly season but in Melbourne this week summer seems to have gone to some heads. Maybe it's the heat wave conditions we have had but three Melbourne-based staff have taken the plunge in the sea (or ocean) of marriage.

Russell Newman, former Panguna supermarket manager, now banished to the colder climes, has announced his engagement to Aufidia Gatto. Asked why he did it, he said that he was having a couple of ales in the local and reckoned it would be a good idea.

Shirley (Sticks) Butterworth, secretary to Brian Barry (Public relations), has announced her engagement to a chemical engineer, Ken Mirams.

And Terry Smith, purchasing officer, has only just remembered this week that he in fact asked a wee Scottish lass by the name of Doris McGuinness last January to marry him early next year. He claims he was stoned at the time and if that's the case, he should really go into the Guinness (excuse the pun) Book of Records for the biggest hangover.

-DAVID BUTCHER
Public Relations, BCP
Melbourne.

WEST IRIAN GETS A NEW "PANGUNA"

With the opening of the Freeport Minerals copper mine at Tembaga Pura in the central mountains of Irian Jaya (recently changed from West Irian) Indonesia now has a mine similar to our own on Bougainville.

The Project, backed by a consortium of US, Japanese and West German banks and companies, was officially opened in March. Full production involving the mining of 2½ million tons of ore a year is due to start in September.

The mine location - believed to be the largest outcrop of base metal in the world - is at snow-laden 11½,000 ft. It contains an average 2.5% copper plus small amounts of gold and silver; all in all about 33 million tons of ore. Mining operations over 13 years are expected to yield some \$840 million worth of minerals.

The Ertsberg orebody was first discovered by a young Dutch geologist Dr. Jean Jacques Dozy. His report was published just before the Japanese occupation of the then Dutch New Guinea. Twenty years later the Freeport Sulphur Company became interested in it and 10 years after that won permission to mine from the Indonesian Government. (The Indonesian Government will have no direct share in the mine but after a three year tax holiday will impose taxes of 35 per cent rising after seven years to 41.25 per cent).

Japanese firms have contracted to buy two-thirds of the copper concentrate and a West German firm the other third.

To get the copper out Freeport has built a port and airstrip. A tramway carries the ore from the mine at 11½,000 to the ore treatment plants at 9,200ft. From there a concentrate pipeline will carry minerals the 68 miles to the sea. A road follows the pipeline over 23 miles of mountain and 40 miles of swamp.

BML ANNUAL MEETING

Mr. F. F. Espie, chairman, speaking at the annual general meeting of Bougainville Mining Ltd. in February, said: "1972 was an eventful year for the company. Bougainville Copper commenced commercial production on 1st April, 1972, after successfully overcoming challenges of inclement climate and geographical location of the kind hitherto unparalleled in mining development. That commercial production commenced some three months ahead of schedule speaks highly of all personnel involved both in Papua New Guinea and throughout the world.

I am pleased to report that consolidated earnings for the period 1st April - 31st December, 1972, after provision for amortisation, depreciation and withholding tax, amounted to \$20,853,957.

I am also pleased to report that the April forecast annual production of 120,000 long tons (121,920 tonnes) of copper in concentrate was achieved.

During 1972, Papua New Guinea's advance towards independence accelerated and responsibility in many areas was transferred from the Australian administration to the Papua New Guinea coalition government.

Late in 1972 the Papua New Guinea House of Assembly passed a resolution recommending guidelines for future mining ventures. Many of the guidelines reflect company policy and practice established over several years.

Bougainville Copper operates under an Agreement with the Papua New Guinea Government which, after considerable negotiation, became law in 1967 following affirmation by the elected House of Assembly. Through its 20% shareholding in Bougainville Copper, recognised by the presence of two government directors on the Board, the government has access to the details of Bougainville Copper's operations and will receive royalties and revenue from dividends as well as taxation on an increasing scale.

There has been some criticism of the benefits derived by the PNG Government under the Agreement. The company believes this criticism stems mainly from a lack of understanding of the Agreement as a whole; of the complex requirements of major lenders and the impact of repayments on the distribution of profits, and the resulting restriction on dividends in the years when the bulk of the repayments are made.

The directors believe that the existing Agreement is reasonable, that it will be recognised as laying down a basis for a commendable partnership with the Government of Papua New Guinea and that it will substantially assist in the development of the financial strength of that country.

During the year two events both outside the control of the company adversely affected its net earnings.

The first of these was the institution by the PNG Government of a 15% withholding tax on dividends paid by PNG companies. Dividends paid by Bougainville Copper to Bougainville Mining are subject to this tax.

The second was the downward movement of sterling in terms of both the U.S. and Australian dollar during the period of commercial production which was not matched by a commensurate rise in the price of copper on the London Metal Exchange. In terms of Australian dollars, this resulted in a reduction in proceeds that Bougainville Copper received from its sales of copper in concentrate. Whilst the rise in the price of gold during 1972 increased the revenue from gold sales, the higher price was not sufficient to offset the reduced earnings from copper sales.

POWER HOUSE SAFETY AWARD OF MERIT

President of the Bougainville Copper Joint Safety Council, Mr. J. D. "Duff" Erickson (ACM - Production) presented an Award of Merit from the National Safety Council of Australia to the power house superintendent Tom Worth, on March 9. The award is for an outstanding safety performance by the employees of the Anewa Bay Power House and is in the form of a certificate and a pennant. The pennant will be flown daily outside the power house while the power house continues to be free of any disabling injury. Also present at the ceremony was the acting general manager, Mr. D. C. Vernon.

The staff and employees of the power house worked from July 1 1972 to December 20, 1972 - a total of 113,417 hours free of disabling injury.



Raising the flag are Ted Lacey, rigger; Mike McShane, safety officer and Mr. Erickson.

The decision of the Australian Government on 23rd December, 1972 to upvalue the Australian dollar against the U.S. dollar will further reduce the Australian dollar proceeds of sales by Bougainville Copper although some short term protection was obtained by taking out forward cover prior to the revaluation.

Bougainville Copper will also receive some off-setting gains on loans which are repayable in U.S. dollars.

However, the directors believe that with the progress that has been made to date, Bougainville Copper can look forward to a successful future and the directors are confident that in the year 1973, a production of 175,000 tonnes of copper contained in concentrate may be expected.

In conclusion directors wish to thank the staff and all employees of the company and its subsidiary for their diligent and effective service and the loyal response to the extra demands made on them in 1972, with the commencement of commercial production".

Managing Director of Bougainville Copper Pty. Limited, Mr. R. W. Ballmer, gave the following review of operations:

ORE RESERVES: No further drilling to define further ore reserves was undertaken in the period and at the end of 1972 estimated ore reserves stood at

(Continued next page)

approximately 900 million tonnes of ore averaging 0.48% copper and 0.55 grams of gold per tonne.

PRODUCTION: During 1972 a total of 46,753,200 tonnes of ore and waste was extracted from the mine. Of this 21,885,252 tonnes of ore were milled, and 123,961 tonnes of copper were produced.

Production for the nine months of commercial production ended 31st December is set out in the table below.

Production *	Nine Months Ended 31st December, 1972	
Ore Milled	18.75	millions of dry tonnes
Grade - copper	0.78	per cent
- gold	0.81	grams/tonne
- silver	2.08	grams/tonne
Concentrate produced	395,092	dry tonnes
Grade - copper	28.20	per cent
- gold	27.50	grams/tonne
- silver	69.25	grams/tonne

* Comprises commercial production. Pre-commissioning production of 3.135 million tonnes (43,023 dry tonnes concentrate) is excluded from the above figures.

The incidence of non-sulphide ore in the crust of the ore-body which affected production results in the early months has continued to diminish with the penetration of the ore-body beyond the oxide zone.

The progressive improvement in ore quality and concentrator performance during the year has enabled the April 1972 forecast of 120,000 long tons (121,920 tonnes) of copper contained in concentrate, to be achieved.

Operation of the processing facilities has been generally satisfactory but, as should be expected with any new mine, minor problems were encountered in the first months of operation. Modifications have been made to ball mill circuits and the installation of an additional ball mill, scheduled for completion in the latter part of 1973, will ensure greater concentrating capacity in future years.

The fleet of mine haul trucks was brought to its full completion of 52 by the delivery of eleven additional trucks during the year.

The mine and concentrator operated on a seven day week throughout the year except for two occasions when cyclonic conditions brought extremely heavy rain to the Panguna area. Measures taken to correct the defects have proved adequate in subsequent storms.

SHIPPING: During the year there were 23 concentrate shipments totalling some 471,120 wet tonnes, the largest of which was 27,690 wet tonnes destined for discharge at Hamburg. The port handled 766,790 freight tonnes, making it the largest port in Papua New Guinea in terms of cargo handled.

WORKFORCE: With the institution of the operating phase, Bougainville Copper ended 1972 with a workforce somewhat in excess of 3,000 employees, of which 70% were Papua New Guineans.

There were no serious industrial disputes during 1972.

In mid-year, a new two-year agreement was reached with the Bougainville Mining Workers' Union relating to wages and working conditions.

TRAINING & EDUCATION: A new training centre was opened at Panguna early in the year to cater for apprenticeship training in all trades used on the mine site. Apprentices currently in training total 240 with a planned increase to 340 in 1973.

Company scholarship holders attending tertiary institutions throughout Papua New Guinea include 22 at the University, 28 at the Institute of Technology and 38 at the Lae Technical College. Training courses

for skilled, semi-skilled and junior supervisory personnel were continued throughout the year.

CONSTRUCTION OF FACILITIES: Construction of key operational facilities was completed by April 1972. The major items of construction associated with original project planning still outstanding are the sealing of the port-mine access road and the construction of additional amenities and recreational facilities at Panguna, including a new interdominational church. These items are scheduled to be completed in 1973.

The final cost of the original project including exploration and development costs is expected to be within the overall budget of \$400 million.

At Arawa, the jointly developed company and Government town, construction has commenced on an additional 190 company residences.

MARKETING:

Sales:

Discussions with the Japanese buyers, Norddeutsche Affinerie (Germany) and Rio Tinto Patino (Spain) to consider their requests for revision of smelting and refining terms were successfully concluded in March and April on a basis satisfactory to all parties. The buyers had sought changes to the smelting and refining terms to assist them in meeting extra anti-pollution costs and cost disadvantages arising from the realignment of international currencies in late 1971.

The Japanese buyers had also requested that Bougainville Copper reduce contractual deliveries during 1972 and 1973 by 20%. However, following discussions, they agreed to accept deliveries of the full contractual tonnage from 1st April, 1972, but to toll smelt and refine 10% of this tonnage for sale of the tolled copper by Bougainville Copper outside Japan. This tolled copper metal has been sold. The tolling arrangement will continue until the end of 1973 when the Japanese buyers will revert to purchasing the full contractual tonnage.

Three new copper concentrate sales agreements were concluded by Bougainville Copper during the year. The first with Norddeutsche Affinerie, covered a total of 40,000 wet tonnes of concentrate, 20,000 wet tonnes of which was subject to two buyer's options each of 10,000 tonnes. The first option was exercised while the second remains open.

Two other sales agreements were signed for the delivery of between 150,000 and 200,000 wet tonnes of concentrate in the period 1973-1976.

Prices:

Prices for copper remained at low levels throughout the year, despite a recovery in demand for copper metal in the U.S.A., Japan and Europe towards the end of the period. A major reason for the depressed prices was the increase in the availability of supply of copper during 1972. Apart from Bougainville Copper, two other major mines commenced production during the year and there were additions to capacity at many existing mines.

While the rise in the price of gold during 1972 provided higher revenue receivable from gold sales, this increase provided only a partial offset for the low prices prevailing for copper on the London Metal Exchange.

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